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# TOWN OF READING

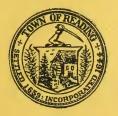
MASSACHUSETTS

THE ANNUAL

### REPORT

For the Financial Year Ended December 31st

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#### TOWN OF READING

## ANNUAL REPORT

FOR THE

# FINANCIAL YEAR ENDED DECEMBER 31

1930

The Reading Chronicle Press Reading, Mass.



#### TOWN OFFICERS 1930-1931

#### Elected and Appointed

#### Board of Selectmen

CHARLES F. TREVOR, Chairman	n Terr	m expires	1931
W. HOMER MORRISON, Secreta		"	1932
MOLLIE A. SWEETSER	"	**	1933
LEON G. BENT, Clerk			
Board of Pul	blic Welfare		
MARY F. DANIEL, Chairman	Terr	m expires	1932
MYRTLE L. LEMAN, Secretary	"	**	1933
CHARLES F. TREVOR	- "	#4	1931
LEON G. BENT, Clerk	HELEN A. BROW	N, Visitor	r
Board of .	Assessors	·	
J. FRED RICHARDSON, Chairma	n Terr	n expires	1931
ALVAH W. CLARK, Secretary	"	45	1933
GEORGE E. HORROCKS	44	46	1932
	Claula		
Town Clerk			
MILLARD F. CHARLES			
MILLARD F	. CHARLES		
MILLARD F Collector of Taxes	. CHARLES  Town Cour	ısel	
	, ,,,		N
Collector of Taxes	Town Cour *MELVILLE F.		
Collector of Taxes GRACE V. VIALI,	Town Cour *MELVILLE F.	WESTO	
Collector of Taxes GRACE V. VIALI, Treasurer	Town Cour *MELVILLE F. To SAMUEL H.	WESTO	1930
Collector of Taxes GRACE V. VIALI, Treasurer	Town Cour *MELVILLE F. To SAMUEL H. From	WESTON April 15, DAVIS	1930 1930
Collector of Taxes GRACE V. VIALI.  Treasurer PRESTON F. NICHOLS	Town Cour *MELVILLE F. To SAMUEL H. From Town	WESTO April 15, DAVIS April 15,	1930 1930
Collector of Taxes GRACE V. VIALI, Treasurer PRESTON F. NICHOLS Moderator	Town Cour *MELVILLE F.  To SAMUEL H. From Town LEON	WESTON April 15, DAVIS April 15, Accountar	1930 1930
Collector of Taxes GRACE V. VIALI.  Treasurer PRESTON F. NICHOLS  Moderator CHARLES P. HOWARD  Board of Pu *SAMUEL H. DAVIS, Chairman to	Town Cour *MELVILLE F.  To SAMUEL H. From Town LEON blic Works April 11, 1930 Terr	WESTON April 15, DAVIS April 15, Accountar	1930 1930 at
Collector of Taxes GRACE V. VIALI.  Treasurer PRESTON F. NICHOLS  Moderator CHARLES P. HOWARD  Board of Pu *SAMUEL H. DAVIS, Chairman to MARTIN B. HARTSHORN, Chairn	Town Cour *MELVILLE F.  To SAMUEL H. From Town LEON blic Works April 11, 1930 Term	WESTON April 15, DAVIS April 15, Accountar G. BENT	1930 1930 at
Collector of Taxes GRACE V. VIALI, Treasurer PRESTON F. NICHOLS  Moderator CHARLES P. HOWARD  Board of Pu *SAMUEL H. DAVIS, Chairman to MARTIN B. HARTSHORN, Chairn from	Town Cour *MELVILLE F.  To SAMUEL H. From Town LEON blic Works April 11, 1930 Term an m April 11, 1930 "	WESTON April 15, DAVIS April 15, Accountar G. BENT m expires "	1930 1930 <b>at</b> 1933
Collector of Taxes GRACE V. VIALI, Treasurer PRESTON F. NICHOLS  Moderator CHARLES P. HOWARD  Board of Pu *SAMUEL H. DAVIS, Chairman to MARTIN B. HARTSHORN, Chairm from WILLIAM T. FAIRCLOUGH, See	Town Cour *MELVILLE F.  To SAMUEL H. From Town LEON blic Works April 11, 1930 Terr an m April 11, 1930 " cretary "	WESTON April 15, DAVIS April 15, Accountar G. BENT m expires " "	1930 1930 <b>at</b> 1933 1931 1932
Collector of Taxes GRACE V. VIALI,  Treasurer PRESTON F. NICHOLS  Moderator CHARLES P. HOWARD  Board of Pu *SAMUEL H. DAVIS, Chairman to MARTIN B. HARTSHORN, Chairm from WILLIAM T. FAIRCLOUGH, See HAROLD W. PUTNAM	Town Cour *MELVILLE F.  To SAMUEL H. From Town LEON blic Works April 11, 1930 Terr an m April 11, 1930 " cretary "	WESTON April 15, DAVIS April 15, Accountar G. BENT m expires " " "	1930 1930 <b>1</b> 1933 1931 1932 1931
Collector of Taxes GRACE V. VIALI, Treasurer PRESTON F. NICHOLS  Moderator CHARLES P. HOWARD  Board of Pu *SAMUEL H. DAVIS, Chairman to MARTIN B. HARTSHORN, Chairm from WILLIAM T. FAIRCLOUGH, See	Town Cour *MELVILLE F.  To SAMUEL H. From Town LEON blic Works April 11, 1930 Terr an m April 11, 1930 " cretary "	WESTON April 15, DAVIS April 15, Accountar G. BENT m expires " " "	1930 1930 <b>at</b> 1933 1931 1932

<sup>\*</sup>Resigned

#### Board of Health

EDWARD M. HALLIGAN, M. D. Chairman	Term	expires	1931
CHRISTINE F. ATKINSON, Secretary	46	46	1933
GEORGE W. S. IDE	66	68	1932

#### Finance Committee

ROBERT B. MOUNT, Chairman	Term	expires	Mar.	31.	1933
EDWARD W. BRIGGS	66	- 66	6.6	"	1931
WILLIAM A. CONNELLY, D. M. D.	66	66	66	66	1931
JOHN L. DEVANEY	66	44	44	66	1931
MARGARET R. ELLISON	66	66	66	66	1931
HARRY G. PORCH	66	44	66	4.6	1931
PEARL M. BURGESS	66	66	. "	66	1932
WILLIAM A. HALEY	44	66	66	66	1932
J. WARREN KILLAM, Jr.	4.6	66	44	44	1932
ORLANDO C. MOYER	6.6	44	66	44	1932
EDWARD J. SCOTT	6.6	4.4	66	"	1932
FOREST H. BRYANT	66	66	66	66	1933
JAMES W. FAIRCHILD	64	66	66	44	1933
HOWARD P. KNOX	66	66	66	66	1933
HELEN R. GRIMES	66	4.6	44	66	1933
LEON G. BENT, Clerk					

#### School Committee

CARL M. SPENCER, Chairman	Term	expires	1933
LAURA S. GORDON	6.6	4.6	1933
JOSEPHINE L. FOWLER	"	66	1931
ARTHUR W. COOLIDGE	66	6.6	1931
HAROLD A. CARNES, D. M. D.	66	8.6	1932
LOGAN R. DICKIE	6.6	46	1932

ADELBERT L. SAFFORD, Secretary

Superintendent of Schools ADELBERT L. SAFFORD

School Attendance Officer ABIGAIL H. MINGO

#### School Nurse MABEL M. BROWN

Municipal Light Board

HENRY R. JOHNSON, Chairman	Term	expires	1932
HERBERT G. EVANS, Secretary	44	46	1933
HARRY P. BAKER	66	+6	1931
ARTHUR G. SIAS, Manager			

#### Board of Cemetery Trustees

PHILIP H. TIRRELL, Chairman CLARENCE C. WHITE, Secretary	Term	expires	1933 1932
HAROLD F. DAVIS	66	66	1933
WINTHROP D. PARKER	46	ef	1932
FRANK LEE EDGERLEY	66	**	1931
FRED L. NUTTER	66	ef	1931
WILLIAM P. PIERPONT, Superintendent			

#### Board of Registrars

OWEN McKENNEY, Chairman	Term	expires	1933
ROBERT S. RALSTON	66	44	1932
WALTER S. PRENTISS	66	66	1931
MILLARD F. CHARLES, Clerk			

#### Planning Board

LELAND W. KINGMAN, Chairman	Term	expires	1932
FREDERICK E. BOYERS, Secretary	66	66	1931
WINTHROP D. PARKER	66	66	1931
GEORGE W. G. POOLE	46	66	1932
MACPHERSON DANIEL	66	66	1933

#### Trustees of Public Library

ARTHUR N. MANSFIELD, Chairman	Term	expires	1933
RALPH S. KENEELY, Secretary	66	44	1931
JESSE W. MORTON	44	66	1931
IDA C. LUCAS	66	. 44	1932
HARRY J. BARCLAY	"	66	1932
JENNY F. WEEKS	66	66	1933

#### Board of Appeal

HENRY Q. MILLETT, Chairman FRED L. NUTTER, Secretary CHARLES A. DAMON

#### Commissioners of Trust Funds

PHILIP H. TIRRELL, Chairman	Term	expires	1935
CLARENCE C. WHITE	66	"	1933
H. RAYMOND JOHNSON	66	"	1931
Town Treasurer and Chairman of Selectmen memb	ers ex	officiis	

#### Police Department

JEREMIAH CULLINANE, Chief FRANCIS T. SLACK, Sergeant

#### Patrolmen

TIMOTHY J. CULLINANE FRANK R. FISHER FRANCIS L. JOHNSON EARL HUTCHINSON JAMES H. LAWLER PATRICK J. LONG OSCAR H. LOW GORDON G. MacINTIRE HAROLD W. O'BRIEN WILLIAM F. O'BRIEN

THOMAS E. WALL

PATRICK J. PANTANO, Special Patrolman

#### Fire Department

ORVILLE O. ORDWAY, Chief

HUGH L. EAMES, Capt. FRANK L. McKENNEY GEORGE W. GOODRIDGE HERBERT L. ROBERTSON JOHN J. O'BRIEN, Capt. CHARLES H. HESELTON WILLIAM H. VAN HORN ALBERT C. MAXWELL

#### Superintendent of Fire Alarm HUGH L. EAMES

Forest Warden
O. O. ORDWAY

Deputy Forest Warden HENRY M. DONEGAN

#### Constables

LEON G. BENT

J. WINTHROP SIAS

Inspector of Milk CARL M. SMITH

Inspector of Plumbing and Gas Inspector
DAVID TAGGART

Inspector of Animals
CALVERT H. PLAYDON, M. D. V.

Inspector of Wires HUGH L. EAMES

Inspector of Building
A. RUSSELL BARNES

Sealer of Weights and Measures CARL M. SMITH

#### Superintendent of Moth Work and Tree Warden

HENRY M. DONEGAN

Burial Agent for Deceased Soldiers and Sailors

ALFRED E. GOODWIN

Custodian of Soldiers' Graves

\*WALTER I. SWEETSER \$HARRY A. TURNER

Inspector of Slaughtering

CHARLES R. HERRICK

Measurers of Wood and Bark

THOMAS E. BROGAN BURTON K. SYMONDS PERCY N. SWEETSER WARREN M. WHITEHOUSE

#### Measurers of Lumber

ORA L. MILBURY
WARREN M. WHITEHOUSE
EDWARD B. EAMES

BURTON K. SYMONDS WILLIAM R. ZWICKER ROLLAND L. PERRY

#### Weighers of Coal and Hay

W. IRVING BANCROFT
BERTHA D. MacLELLAN
WENDELL B. NEWELL
CHARLES W. LEE
KATHERINE L. SWEETSER

THOMAS E. BROGAN MABEL L. MacKAY PERCY N. SWEETSER WILLIAM D. WARD RUTH CLIMO

CHARLES H. SWEETSER

#### Field Drivers

WILLARD A. BANCROFT

OFT ADOLPH S. LARSEN ROLLAND L. PERRY

#### Fence Viewers

CARL B. SAWYER

ALBERT E. TEMPLE

WENDELL B. NEWELL

#### Director of Agriculture and Home Economics

(Chapter 128, Section 41, General Laws)
ROLLAND L. PERRY

#### Soldiers' Memorial Committee

ELIAS B. CURRELL, Chairman \*SALLY F. BUCK SAMUEL H. DAVIS FRANK D. TANNER GRACE B. SHEPARDSON LELAND W. KINGMAN WINTHROP D. PARKER DANIEL H. SHAY

\*Deceased

§Appointed to fill vacancy

#### Safety Council

FLORENCE H. LIBBY ALVAH W. CLARK ADELBERT L. SAFFORD GLADYS S. N. FAIRCHILD EDWARD G. QUINLAN JEREMIAH CULLINANE

WILLIAM J. LUMBERT

#### Committee on Revision of Zoning By-Laws

HENRY R. JOHNSON JAMES P. BROWN WILLARD P. ADDEN Members of Planning Board

#### Committee on Town Forests

LELAND W. KINGMAN, Chairman ORVILLE O. ORDWAY HENRY M. DONEGAN .

#### Committee on Revision of Building Laws

ELIAS B. CURRELL, Chairman HAROLD F. PARKER

FRANK E. GRAY ARTHUR MICHELINI

WINTHROP D. PARKER

#### TOWN OF READING

Population 1930 Census: 9747.

Registered Voters 1930: Men 2321, Women 2374, Total 4695.

Fifth Congressional District.

Sixth Councillor District.

Seventh Middlesex Senatorial District.

Eighteenth Middlesex Representative District.

Representative in Congress, 5th District, Edith Nourse Rogers, Lowell.

Councillor 6th District, Joseph O. Knox, Medford.

Senator 7th Middlesex District, Joseph R. Cotton, Lexington.

Representatives 18th Middlesex District, Norman L. Duncan and Fred H. Bowser, Jr., Woburn.

#### LIST OF JURORS FOR 1930-1931

#### Prepared by the Board of Selectmen

Abbott, Edwin K., Clerk	12 Bancroft Ave.
Abbott, George W., Ass't Manager	20 Mineral St.
Albee, George H., Clerk	12 Mineral St.
Allen, Lawrence W., Clerk	29 Sanborn St.
Anderson, Walter J., Manager	63 Summer Ave.
Barclay, Harry J., Accountant	Vale Rd.
Bedley, Robert A., Salesman	75 Howard St.
Bell, J. Angus, Voicer	Hanscom Ave.
Berle, Theodore P., Insurance	126 Ash St.
Blood, Ernest A., Salesman	33 Hillcrest Rd.
Boyers, Frederick E., Bookkeeper	45 Howard St.
Brackett, Herbert A., Merchant	176 Summer Ave.
Briggs, Edward W., Treasurer	40 John St.
Brooks, George Clark, Salesman	48 Hillcrest Rd.
Browne, George H., Salesman	97 Prescott St.
Bryant, Forest H., Adjuster	II Lowell St.
Burgess, Pearl M., Merchant	o Dudley St.
Burgess, Robert S., Insurance Agent	28 Pratt St.
Burnham, Vaughan F., Salesman	65 Highland St.
Carleton, Philemon P., Clerk	81 Prospect St.
Carroll, Granger, Carpenter	13 John St.
Charles, Warren F., Clerk	20 Pleasant St.
Christensen, Andrew, Florist	Sunnyside Ave.
Clough, George H., Manufacturer	8 Perkins Ave.
Colley, George A., Merchant	28 Prospect St.
Corbett, Howard L., Telephone	36 Ash St.
Crooker, Elmer P., Real Estate	70 Salem St.
Cullinane, Charles M., Trucking	119 Washington St.

Cummings, Joseph P., N. E. Tel. & Tel. Co. 4 Grant St. Danforth, Percy R., Druggist 17 Middlesex Ave. Davis, Malcolm C., Teacher 12 Federal St. Dennison, Ralph H., Clerk Copeland Ave. Devaney, Martin L., Bookkeeper 59 Ash St. Dickie, Logan R., Treasurer 56 Walnut St. Dickinson, Norman L., Auto Painter 40 Mt. Vernon St. Donegan, Maurice H., Salesman 243 Main St. Dukelow, John, Superintendent Spruce Rd. Fairclough, William T., Civil Engineer Grove St. Farwell, Howard P., Insurance 128 Salem St. Fleming, Harold I., Traffic Manager 41 Hanscom Ave. Fortune, William J., Assistant Vice President 60 Prescott St. Gale, Roger D., Chemist 8 Dudley St. Goldsmith, Alexander E., Salesman 75 West St. Graupner, Albert C., Meat Cutter 35 Pleasant St. o Ash St. Haag, Leslie J., Clerk Harnden, Edward E., Salesman 195 Summer Ave. Hawkins, Louis O., Engineer 21 Arlington St. Henderson, William A., Bond Salesman 126 Woburn St. Higgins, Royal G., Jr., Salesman 8 Kingston St. Holcomb, Charles A., Advertising б John St. Hopkins, Walter S., Merchant 348 Summer Ave. 101 Middlesex Ave. Hutchinson, Jesse N., Porter 96 Oak St. Ives, C. Quincy, Salesman Keating, Raymond O., Accountant 11 Kingston St. Killam, James W., Civil Engineer 16 Arlington St. Knight, Joseph D., Manager 7 Perkins Ave. 16 Locust St. Macdonald, Alexander F., Bookkeeper Marston, Chester H., Accountant 41 Prescott St. McCaughy, Joseph, Foreman 11 Elliott St. Merritt, Robert M., Salesman 1 Dudley St. 59 Linden St. Millett, Henry Q., Auditor Nash, Mahlon G., Weather Stripper 11 Hancock St. Nodding, Leonard J., Salesman 42 Berkeley St. Noyes, Herman M., Buyer .57 Howard St. Owen, John W., Civil Engineer 155 Main St. Parker, Harold F., Insurance 24 Pratt St. Parker, Percival, Salesman Partelow, Arthur E., Manufacturer Paul, Theodore L., Accountant Perkins, Thomas, Superintendent Pinkham, Carl W., Voicer Pomfret, George H., Bookkeeper Prentiss, Archer R., Insurance Quigley, H. Harvey, Painter Ralston, Robert S., Compositor Richardson, Charles L., Broker Richardson, Charles W., Clerk Roberts, Arthur E., Treasurer Robinson, Joseph E., Insurance Rogers, Ernest W., Merchant Ruggles, Walter G., Manufacturer Schoppelry, Herbert T., Carpenter Sias, Wilbur S., Machinist Smith, Carl M., Druggist Smith, Frank A., Draughtsman Stembridge, Alfred R., Salesman Stevens, Frank M., Special Agent Stimpson, George H., Salesman Thompson, Sylvanus L., Mechanic Torrey, Howard, At Home Veazie, Harold K., Clerk Wells, Charles D., Blacksmith Whitchurch, Ruel L., Farmer Wilson, Richard N. B., Auditor Wilson, W. Fred, Salesman Winslow, Warren L., Insurance Wright, Marc S., Treasurer Young, Frank W., Tailor

64 Washington St. 22 Middlesex Ave. 2 Cross St. 29 Woburn St. 24 Pleasant St. 13 Winter St. 33 Berkeley St. 119 Main St. 1a Dudley St. 302 Summer Ave. 107 Haven St. 128 Summer Ave. 60 Lowell St. 193 Main St. 10 Fremont St. 223 Lowell St. 430 Main St. 10 Linden St. 29 Berkelev St. 56 Mineral St. 4 School St. 7 Kingston St. 8 Intervale Ter. 159 Summer Ave. 48 John St. 55 Prescott St. 279 Franklin St. 169 Woburn St. 24 Arlington St. 65 Mineral St. 32 Hillcrest Rd.

#### Approved:

CHARLES F. TREVOR W. HOMER MORRISON MOLLIE A. SWEETSER

Selectmen of Reading

19 Highland St.

Reading, Mass. June 30, 1930.

#### TOWN MEETINGS, 1930

#### SPECIAL TOWN MEETING

Security Hall, Woburn St., Feb. 17, 1930.

Pursuant to a warrant duly issued and posted according to law, a town meeting was held at the place and time mentioned therein. The meeting was called to order by the Moderator. The Town Clerk proceeded to read the warrant. When same was partly read, Charles F. Trevor made a motion to dispense with further reading of the warrant except the Constable's return which was so voted. Then the Constable's return was duly read by the Town Clerk.

Article 1. To hear and act on the reports of town officers and special committees and determine what instructions will be given town officers and special committees.

Article 1. On motion of Charles F. Trevor, it was voted to lay Article 1 on the table.

Article 2. To see if the Town will authorize the Board of Selectmen to procure plans and estimates for the construction and furnishing of a police station, so-called, to provide facilities for the Police Department and a town lockup, and to see what sum the Town will raise and appropriate for the cost of such plans and estimates or what it will do in relation thereto.

Board of Selectmen

Article 2. On motion of Charles F. Trevor, it was voted that the Board of Selectmen be authorized to procure plans and estimates for the construction and furnishing of a police station, so-called, to provide facilities for the Police Department and town lockup and that six hundred dollars be raised and appropriated for the cost of such plans and estimate, the matter to be presented at a later town meeting.

Article 3. To see if the Town will raise and appropriate as provided by Acts of 1930 the sum of three thousand dollars, (\$3,000.00) for the observance of the tercentenary of the founding of the Massachusetts Bay Colony, or what it will do in relation thereto.

Tercentenary Committee

Article 3. On motion of James W. Killam, it was voted that three thousand dollars be raised and appropriated as provided by legislative acts of 1930 for the observance of the tercentenary of the founding of the Massachusetts Bay Colony, said sum to be expended under the direction of the Tercentenary Committee.

Article 4. To see if the Town will accept the report of the Board of Public Works on laying out or, relocating, or altering Main Street by widening the same at its westerly side and northerly of its

intersection with Haven Street, so that the westerly side line of said Main Street as so laid out, relocated or altered shall be a line beginning at a point on the northerly line of Haven Street 33 feet southwest of the intersection of the northerly line of Haven Street with the westerly line of Main Street, thence running due north for a distance of 239.64 feet on property of the Masonic Temple Corporation, Arthur D. Gordon, Friend Bros. Realty Trust and Anna Goldberg, thence by a curve to the left having a radius of 250.15 feet for a distance of 82.52 feet on the property of Anna Goldberg to a point of intersection with the westerly line of Main Street and to see if the Town will accept the said way as so laid out or relocated or altered and to see what amount the Town will raise and appropriate by borrowing or otherwise to defray the expense of such widening, including all land damages incident thereto, or what it will do in relation thereto.

#### Board of Public Works

Article 4. It was moved by Samuel H. Davis to accept the report of the Board of Public Works laying out and or relocating and or altering Main Street by widening the same at its westerly side and northerly of its intersection with Haven Street so that the westerly side line of said Main Street as so laid out and or relocated and or altered shall be a line beginning at a point on the northerly line of Haven Street 33 feet southwest of the intersection of the northerly line of Haven Street with the westerly line of Main Street, thence running due north for a distance of 239.64 feet on property of the Masonic Temple Corporation, Arthur D. Gordon, Friend Bros. Realty Trust and Anna Goldberg, thence by a curve to the left having a radius of 250,15 feet for a distance of 82.52 feet on the property of Anna Goldberg to a point of intersection with the westerly line of Main Street and to accept the said way as so laid out and or relocated and or altered and to raise and appropriate the sum of \$111,000.00 to defray the expense of such widening, including all land damages incident thereto and that of the said sum of \$111,000.00 there be raised in the tax levy of the current year the sum of \$27,500.00 and that the Treasurer with the approval of the Selectmen be and he is hereby authorized to borrow the sum of \$83,500,00 and to issue bonds or notes to be therefor, said bonds or notes to be payable in accordance with the provisions of Chapter 44 of the General Laws so that the whole loan shall be paid in not more than ten years from the date of issue of the first bond or note or at such earlier date as the Treasurer and Selectmen may determine.

The vote was taken by ballot with the following result:

Yes 171

No 318

Not being a two-thirds vote it was declared not carried.

Article 5. To see what sum the Town will raise and appropriate by borrowing or otherwise to be expended under the direction of the Board of Public Works for construction in the widening of Main Street on the westerly side at and northerly of Haven Street, including back filling, resurfacing, curbing, pavement and sidewalk construction or what it will do in relation thereto.

Board of Public Works

Article 5. On motion of Theodore P. Berle, it was voted to lay this article on the table.

Article 6. To see if the Town will raise and appropriate by borrowing or otherwise, the sum of \$25,000.00 to be expended under the direction of the Municipal Light Board for the purpose of installing on Main Street from a point adjacent to the Reading Theatre building to a point adjacent to the junction of Main and Salem Streets, underground ducts, manholes and cables including transformer installations and service connections to consumers' premises and connecting to the overhead system on intersecting streets, also installing twenty-three ornamental street lights with the necessary posts and underground connections and of removing all existing overhead construction, including wires, crossarms, transformers and streets lights and such of the existing poles as are not needed for the support of wires of other utilities, or what it will do in relation thereto.

Municipal Light Board

Article 6. On motion of George W. Davis, it was voted to lay this article on the table.

Article 7. To see what amount, if any, the Town will raise and appropriate to be expended under the direction of the Board of Selectmen in laying underground the signal and other wires of the police and fire departments on Main Street between the building of the Municipal Light Department and Salem Street or what it will do in relation thereto.

Supt. of Fire Alarm

Article 7. On motion of Theodore P. Berle, it was voted to lay this article on the table.

On motion of Charles F. Trevor, it was voted to adjourn without date.

The following were appointed as checkers at the meeting of Feb. 17, 1930. David J. Whelton, George L. Pratt, Louise M. Whelton, Jessie N. Thaxter.

Whole number checked in, 545.

MILLARD F. CHARLES, Town Clerk

#### ANNUAL TOWN ELECTION

#### Security Hall, Woburn St., March 3, 1930

Pursuant to the warrant duly issued and posted by the Constable, a town meeting was held at time and place therein specified and was called to order by the Moderator, Charles P. Howard. The warrant was partly read, when on motion of Charles F. Trevor, it was voted to dispense with further reading except the Constable's return which was duly read.

Article 1. To bring in their votes on one ballot for Moderator; one member of the Board of Selectmen for three years; Treasurer; Collector of Taxes; one member of the Board of Assessors for three years; Town Clerk; two members of the Board of Public Works for three years; Tree Warden; one member of the Board of Health for three years; one member of the board of Public Welfare for three years; two members of the School Committee for three years; two Trustees of the Public Library for three years; one member of the Municipal Light Board for three years; two members of the Board of Cemetery Trustees for three years; two Constables; one member of the Planning Board for three years.

Moderator, One Year	
Charles P. Howard, 122 Summer Ave	1944
Blanks and scattering	456
Town Clerk, One Year	
Millard F. Charles, 66 Bancroft Ave.	2112
Blanks	288
Selectman, Three Years	
James E. Lewis, 10 Park St	722
Mollie A. Sweetser, 110 Woburn St.	1597
Blanks	81
Board of Public Welfare, Three Years	
Myrtle L. Leman, 13 School St.	1920
Blanks	380
Assessor, Three Years	
Alvah W. Clark, 232 Main St	1069
Arthur S. Cook, 59 Bancroft Ave	908
Charles F. Gormlie, 36 Pearl St	276
Blanks	147
Treasurer, One Year	
Preston F. Nichols, 56 Linden St	2070
Blanks	330

Tax Collector, One Year

Grace V. Viall, 42 Bancroft Ave.	<b>207</b> 8
Blanks  Board of Public Works, Three Years	322
Samuel H. Davis, 67 Highland St	1261
Frank E. Gray, 91 Middlesex Ave.	975
Frank M. Merrill, 9 Dudley St	1203
Herbert J. Wooldridge, 138 High St.	855
Blanks	<b>50</b> 6
Two Constables, One Year	
Leon G. Bent, 215 Main St.	1966
James W. Sias, 5 Salem St.	1888 939
Blanks	939
Tree Warden, One Year Henry M. Donegan, 15 Federal St	2129
Blanks	271
Municipal Light Board, Three Years	
Herbert G. Evans, 40 Howard St.	1896
Blanks	504
School Committee, Three Years	
Laura S. Gordon, 92 Haven St.	1359
Grace B. Shepardson, 48 King St.	1360
Carl M. Spencer, 119 Woburn St.	1393 688
Blanks	000
Board of Health, Three Years Christine F. Atkinson, 32 Washington St	2069
Blanks	331
Trustees Public Library, Three Years	001
Arthur N. Mansfield, 107 Woburn St.	1964
Jenny F. Weeks, 99 Summer Ave.	1887
Blanks	949
Cemetery Trustees, Three Years	
Harold F. Davis, 10 Forest St.	1949
Philip H. Tirrell, 225 Main St.	1899 952
Blanks Planning Board, Three Years	954
McPherson Daniel, 17 Harnden St	1951
Blanks	449
The votes were counted and declared in open town mee	ting,
sealed and delivered to the Town Clerk whereupon the meeting	ad-
journed.	T The
MILLARD F. CHAR Town (	
10WII (	JICI K

Reading, March 7, 1930.

The Board of Registrars on petition for a recount of votes cast for School Committee made the following report on the result as recounted.

·	Election	Recount
Laura S. Gordon	1359	1366
Grace B. Shepardson	1360	1362
Carl M. Spencer	1393	1404
Blanks	688	672

MILLARD F. CHARLES, Town Clerk.

#### ANNUAL TOWN MEETING

Security Hall, Woburn St., March 10, 1930.

Pursuant to the annual warrant a town meeting was held and called to order by the Moderator, Charles P. Howard, and proceeded to act on the following articles.

Article 2. To hear and act on the reports of the Board of Selectmen; Town Accountant; Treasurer; Collector of Taxes; Board of Assessors; Board of Public Works; Town Clerk; Tree Warden; Board of Health; Board of Public Welfare; School Committee; Public Library Trustees; Municipal Light Board; Board of Cemetery Trustees; Finance Committee; Planning Board or any other Boards and Special Committees.

Article 2. On motion of Theodore P. Berle, it was voted that it is the sense of this meeting that all officials of the Town shall furnish their copy of their reports for the annual town report on or before February 1st, of the year of issue of such report.

Article 2. On motion of Charles F. Trevor, it was voted to lay this article on the table.

Article 3. To choose all other necessary town officers and determine what instructions shall be given town officers and special committees.

Article 3. On motion of Charles F. Trevor, it was voted that the following be chosen to serve as Measurers of Lumber for the ensuing year: Ora L. Milbury, Edward B. Eames, Burton K. Symonds, William R. Zwicker, Warren M. Whitehouse, Rolland L. Perry; and the following as Measurers of Wood and Bark: Percy N. Sweetser, Burton K. Symonds, Thomas E. Brogan, Warren M. Whitehouse.

Article 4. To determine how much money the Town will raise and appropriate for General Government, Protection of Persons and Property, Health and Sanitation, Highways, Charities, Soldiers, Benefits, Schools, Public Library, Recreation, Cemetery Department, Memorial Day Observance, Municipal Light Department, Water Department, Maturing Debt, Interest, Insurance, and General Accounts.

Article 4. On motion of Charles F. Trevor, it was voted that \$25,166.00 be raised and appropriated for general government as follows:

Selectmen's Expenses	\$ 300.00
Selectmen's Clerical	1,310.00
Town Accountant's Salary	2,000.00
Treasurer's Salary	1,200.00
Treasurer's Expenses	600.00
Collector's Salary	2,300.00
Collector's Expenses	1,300.00
Collector's Clerical	400.00
Assessors' Salaries	1,800.00
Assessors' Expenses	1,400.00
Assessors' Clerical	2,756.00
Block System Survey	500.00
Town Counsel's Salary	500.00
Town Counsel's Expenses	100.00
Town Clerk's Salary	350.00
Town Clerk's Expenses	600.00
Board of Public Works, Salaries & Office Expenses	6,000.00
Registrars' Salaries	250.00
Election and Registration Expenses	1,500.00

\$25,166.00

Article 4. On motion of Charles F. Trevor, it was voted that there be raised and appropriated for general accounts as follows: Miscellaneous Expenses ..... \$ 2,500.00 3,000.00 Municipal Building Maintenance ..... 1,450.00 Fire Stations, Maintenance ..... 25.00 G. A. R. Rooms, Lighting ..... 5.750.00 Insurance ..... 350.00 Planning Board Expenses ..... Maturing Debt (not including Water, Light or Sewer) .... 38,000.00

\$ 51,075.00

Article 4. On motion of Charles F. Trevor, it was voted that \$74,407.00 be raised and appropriated for protection of persons and property as follows:

Police Department, Maintenance	\$ 3,655.00
Police Dept. Salaries and Special Officers	31.218.00
	,
Fire Department, Maintenance	3,130.00
Fire Dept. Salaries	19,800.00
Fire Dept. Call Men Salaries	3,367.00
Fire Alarm, Maintenance	2,762.00
Moth Department, Maintenance	6,000.00
Tree Warden, Maintenance	2,500.00
Forest Warden, Maintenance	500.00
Inspector of Buildings, Salary	500.00
Inspector of Wires, Salary	200.00
Inspector of Wires, Expenses	50.00
Sealer of Weights and Measures, Salary	500.00
Sealer of Weights and Measures, Expenses	225.00

\$ 74,407.00

Article 4. On motion of Samuel H. Davis, it was voted that the Town raise and appropriate \$7,980.00 for hydrant rentals, and \$100.00 for drinking fountains and that the above-named sums, together with the Water Dept. receipts estimated at \$56,000.00 and the balance on hand, January 1, 1930 of \$16,806.97 be appropriated for payment of water bonds, interest on bonds, maintenance, operation and construction of water works.

Article 4. On motion of Charles F. Trevor, it was voted that \$6,300.00 be raised and appropriated for health and sanitation as follows:

Board of Health, Salaries	\$ 300.00
Board of Health, Expenses	600.00
Inspector of Plumbing, Salary	800.00
Inspector of Animals, Salary	200.00
Inspector of Milk, Salary	100.00
Care of Contagious Diseases	2,000.00
Garbage Collection	2,300.00

\$ 6,300.00

Article 4. On motion of Charles F. Trevor, it was voted to raise and appropriate \$6,500.00 for soldiers' benefits as follows:

State Aid	\$ 200.00
Military Aid	300.00
Soldiers' Relief	<b>6,000.00</b>

Article 4. On motion of Samuel H. Davis, it was voted that the sum of \$50,000.00 be raised and appropriated for construction, maintenance and repairs of highways, the purchase of materials, tools and appliances and for the payment of any other incidental expenses pertaining thereto. \$50,000.00

Article 4. On motion of Samuel H. Davis, it was voted that the sum of eight thousand dollars be raised and appropriated for sidewalk construction and curb stones. \$8,000.00

Article 4. On motion of Samuel H. Davis, it was voted that the sum of five thousand dollars be raised and appropriated for the removal of snow and ice. \$5,000.00

Article 4. On motion of Samuel H. Davis, it was voted that the sum of three thousand dollars be raised and appropriated for the maintenance of storm drains and waterways. \$3,000.00

Article 4. On motion of Samuel H. Davis, it was voted that the sum of five hundred dollars be raised and appropriated for the care of dumps. \$500.00

Article 4. On motion of Samuel H. Davis, it was voted that the sum of five thousand dollars be raised and appropriated for the care of the Common, parks and supervised play. \$5,000.00

Article 4. On motion of Henry R. Johnson, it was voted that there be included in the tax levy for electricity used for street lights the sum of twelve thousand dollars, and that said sum, and the income from sales of electricity, merchandise and jobbing during the current fiscal year be appropriated for the municipal lighting plant, the whole to be expended by the manager of municipal lighting under the direction and control of the Municipal Light Board for the expense of the plant for said fiscal year as defined in Section 57 of Chapter 164 of the General Laws and that, if there should be an unexpended balance thereof at the end of said fiscal year, such balance shall be transferred to the construction fund of said plant and appropriated and used for such additions thereto as may be authorized by the Municipal Light Board during the next fiscal year.

\$12,000.00

Article 4. On motion of Mary F. Daniel, it was voted that seventeen thousand, four hundred fifty-two dollars be raised and appropriated for Charities and Aid as follows:

Board of Public Welfare:

Visitor's Salary	\$ 600.00
Clerical Salary	352.00
Aid, Board and Care	10,000.00
Mothers' Aid	4,000.00
Temporary Aid	2,500.00

Article 4. On motion of Carl M. Spencer, it was voted that the sum of two hundred thirty-eight thousand four hundred and fifty dollars be raised and appropriated for School Expenses divided as follows:

General Maintenance	 \$ 55,250.00
General Salaries	
Agricultural Maintenance	
Agricultural Salaries	 2,800.00
Industrial Tuition	 600.00

\$238,450.00

Article 4. On motion of Ralph S. Keneeley, it was voted that the sum of eight thousand dollars be raised and appropriated for the Public Library divided as follows:

Public	Library,	Maintenance	\$ 3,200.00
Public	Library,	Salaries	4,800.00

\$ 8,000.00

the same to be expended under the direction of the Trustees of the Public Library.

Article 4. On motion of Philip H. Tirrell, it was voted that ten thousand one hundred and fifty dollars be raised and appropriated for Cemeteries as follows:

Maintenance	of Laurel Hill Cemetery	\$ 8,900.00
Development	of Forest Glen Cemetery	1,250.00

\$ 10,150.00

Article 4. On motion of Charles F. Trevor, it was voted that six hundred dollars be raised and appropriated for Memorial Day observance, to be expended under the direction of Reading Post No. 62 American Legion. \$600.00

Article 5. To see if the Town will authorize the Treasurer, with the approval of the Selectmen, to borrow money from time to time in anticipation of revenue of the financial year beginning January 1, 1930, and to issue a note or notes therefor, payable within one year, any debt or debts incurred under this vote to be paid from the revenue of said financial year.

Town Treasurer

Article 5. On motion of Preston F. Nichols, it was voted that the Treasurer be authorized, with the approval of the Selectmen, to borrow money from time to time in anticipation of revenue of the financial year beginning January 1, 1930, and to issue a note or notes therefor, payable within one year, any debt or debts incurred under this vote to be paid from the revenue of said financial year.

Article 6. To see if the Town will authorize the Treasurer, with the approval of the Selectmen, to renew or refund any notes issued in anticipation of revenue for a period of less than one year, in accordance with the provisions of Section 17, Chapter 44, General Laws, or what it will do in relation thereto.

Town Treasurer

Article 6. On motion of Preston F. Nichols, it was voted that the Treasurer be authorized, with the approval of the Selectmen, to renew or refund any notes issued in anticipation of revenue for a period of less than one year, in accordance with the provisions of Section 17, Chapter 44, General Laws.

Article 7. To see if the Town will raise and approprite the sum of five thousand dollars (\$5,000.00) for the Reserve Fund as provided by Section 6, Chapter 40, General Laws, or what it will do in relation thereto.

Town Accountant

Article 7. On motion of Leon G. Bent, it was voted that the sum of five thousand dollars be raised and appropriated for the Reserve Fund as provided by Section 6, Chapter 40 of the General Laws.

Article 8. To see if the Town will raise and appropriate the sum of eighty-two dollars and ninety-eight cents (\$82,98) to balance overdraft in School Department, Vocational Tuition Account, or what it will do in relation thereto.

Town Accountant

Article 8. On motion of Leon G. Bent, it was voted that the sum of eighty-two dollars and ninety-eight cents be raised and appropriated to balance overdraft in School Department, Vocational Tuition Account. \$82.98

Article 9. To see if the Town will raise and appropriate the sum of three hundred and sixty dollars (\$360.00) for the purpose of providing suitable quarters for Veteran Post No. 194, G. A. R., in accordance with the provisions of Section 5, Chapter 40, General Laws, or what it will do in relation thereto.

Board of Selectmen

Article 9. On motion of Charles F. Trevor, it was voted that three hundred sixty dollars be raised and appropriated for the purpose of providing suitable quarters for Veteran Post No. 194, G. A. R., in accordance with the provisions of Section 5, Chapter 40, General Laws.

Article 10. To see if the Town will raise and appropriate the sum of six hundred dollars (\$600.00) for the care of graves of any persons who have served in the Army, Navy or Marine Corps of the United States, in time of war or insurrection, and who have been honorably discharged, from such service, as provided by Section 22, Chapter 115, General Laws, or what it will do in relation thereto.

Board of Selectmen

Article 10. On motion of Charles F. Trevor, it was voted that six hundred dollars be raised and appropriated for the care of graves of any persons who have served in the Army, Navy or Marine Corps of the United States, in time of war or insurrection, and who have been honorably discharged from such service, as provided by Section 22, Chapter 115, General Laws. \$600.00

Article 11. To see if the Town will authorize the construction of a Police Station so called, providing facilities for the Police Department and a town lock-up, and to see how much money it will raise and appropriate therefor, by borrowing or otherwise, or what it will do in relation thereto.

#### Board of Selectmen

Article 11. On motion of Charles F. Trevor, it was voted that the sum of fifty thousand dollars be raised and appropriated for the purpose of constructing, equiping and furnishing a building to be used as a Police Station and a town lock-up; that five thousand dollars of said sum be raised and appropriated from the tax levy of 1930 and that the Town Treasurer, with the approval of the Selectmen, be and he hereby is authorized to borrow for the above purposes the balance of said sum, to wit, forty-five thousand dollars, and to issue bonds or notes of the Town therefor, said bonds or notes to be paid in accordance with the provisions of Chapter 44 of the General Laws and Acts in amendment thereof and in addition thereto, so that the whole loan shall be paid in not more than nine years, or such earlier date as the Treasurer and Selectmen may determine.

Yes 555 No 10

and it was declared a two-thirds vote.

Article 12. To see if the Town will authorize the Board of Selectmen to supervise the construction of proposed Police Station, with full power to act in behalf of the Town, and with authority to make contracts and do every other necessary thing in the name of the Town in connection with the erection and completion of said Police Station, including facilities for the Police Department and for the town lock-up, or what it will do in relation thereto.

#### Board of Selectmen

Article 12. On motion of Charles F. Trevor, it was voted that the Board of Selectmen be and it hereby is authorized to supervise the construction of the proposed Police Station with full power to act in behalf of the Town and with authority to make contracts and to do every other necessary thing in the name of the Town in connection with the erection and completion of said Police Station, including facilities for the Police Department and for the town lock-up.

Article 4. On motion of Charles F. Trevor, it was voted that the sum of twenty-eight thousand dollars be raised and appropriated for the payment of interest on bonds and notes due in 1930 not including water and light loans. \$28,000.00

Article 13. To see if the Town will vote whether or not licenses for motion pictures on Sunday be granted.

Board of Selectmen

Article 13. On motion of Charles F. Trevor to see what the sense of the meeting is in regard to the Selectmen licensing the theatre to open on Sunday for movies, it was voted that the sense of the meeting was such action by the Selectmen.

Article 14. To see if the Town will raise and appropriate by borrowing or otherwise, thirty-five thousand dollars (\$35,000.00) for the extension of the water system, by the erection or another standpipe, the installation of the necessary connecting mains, and the taking or purchase of land therefor, or what it will do in relation thereto.

Board of Public Works

Article 14. On motion of Samuel H. Davis, it was voted that the sum of thirty-five thousand dollars be and the same is hereby appropriated for the extension of the water system, by erecting a new standpipe, the purchase of land therefor and the installation of the necessary connecting mains, and that the Board of Public Works be and they are hereby authorized and empowered and directed to purchase such land as they may deem suitable therefor upon such terms and conditions as they may determine; and that the Town Treasurer with the approval of the Board of Selectmen, be and hereby is authorized to borrow said sum and issue therefor bonds or notes of the Town in accordance with provisions of Chapter 44 of the General Laws, and Acts amendatory thereof, and in addition thereto, so that the whole of said loan shall be paid in not more than fifteen years, or at such earlier time as the Treasurer and Board of Selectmen may determine and shall be signed by the Treasurer and countersigned by the Selectmen.

> YES 516 NO None

and it was declared a two-thirds vote.

Article 37. To see if the Town will raise and appropriate, by borrowing or otherwise, the sum of thirteen thousand, two hundred eighty-nine and twenty-eight one hundredths (\$13,289.28) dollars for the development of storm water drainage, or what it will do in relation thereto.

Board of Public Works

Article 37. On motion of Samuel H. Davis, it was voted to take up Article 37.

On motion of Samuel H. Davis, it was voted that the sum of thirteen thousand two hundred eighty-nine and twenty-eight hundredths dollars be raised and appropriated for the development of storm water drainage. Article 27. To see if the Town will vote to authorize the Board of Public Works to acquire by purchase or gift, in the name and behalf of the Town, such lands in and about Birch Meadow, so-called, as they may deem suitable for use for the purposes of a public playground, said lands when received to be held and used under the supervision and control of the Board of Public Works for the purpose of a public playground and to raise and appropriate by borrowing or otherwise the sum of thirteen thousand four hundred dollars (\$13,400.00) to be expended under the direction of the Board of Public Works in payment for such lands as may be purchased and for the legal examination of titles and for a survey of any lands so acquired and for the development of a playground, or what it will do in relation thereto.

Planning Board

Article 27. On motion of Leland W. Kingman, it was voted to take up Article 27.

On motion of Leland W. Kingman, it was voted that the Town authorize the Board of Public Works to acquire by purchase or gift in the name and behalf of the Town such lands in and about Birch Meadow, so-called, as they may deem suitable for use for the purpose of a public playground, said lands when received to be held and used under the supervision and control of the Board of Public Works for the purposes of a public playground, and to raise and appropriate the sum of three thousand dollars, to be expended under the direction of the Board of Public Works in payment for such lands as may be purchased and for the legal examination of titles and for a survey of any lands so acquired and for the development of a playground.

On motion of Charles F. Trevor, it was voted to adjourn to meet in Security Hall on Monday, March 17, 1930.

MILLARD F. CHARLES, Town Clerk

#### ADJOURNED ANNUAL TOWN MEETING

Security Hall, Woburn St., March 17, 1930

Pursuant to adjournment a Town meeting was held and was called to order by the Moderator, Charles P. Howard.

Article 15. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Vale Road, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public

highway laid out by the Board of Public Works, and heretofore known as Vale Road, or what it will do in relation thereto.

Board of Public Works

Article 15. On motion of Samuel H. Davis, it was voted to accept the following layout of Vale Road.

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons present who desired to be heard, have laid out as a town way for the use of the Town running easterly and southerly from Vine Street, substantially in the location of the private way known as Vale Road. The boundaries and measurements of said way as so laid out are as follows:

The northerly side line of said Vale Road commences at a point on the easterly side line of said Vine Street, said point being N. 32 degrees 37' and 00" W. a distance of 13.49 feet from a stone bound set on the said easterly side line of Vine Street at the southwesterly corner of land of William E. Johnson.

From thence the said northerly side line runs with a curve to the left on a radius of 20 feet, a length of 24.42 feet to a point of tangent;

Thence N. 77 degrees, 26' and 00" E. a distance of 551.19 feet to a stake set on the northerly and easterly side line of said Vale Road at the division line of lands of Margaret T. Lyons and Lillian M. Johnson;

Thence S. 13 degrees, 47' and 00" E. a distance of 144.28 feet to a point of curve;

Thence with a curve to the left on a radius of 20 feet a length of 32.34 feet to a point of tangent on the northerly side line of said Woodward Avenue and at the end of this layout.

The southerly and westerly side lines of said Vale Road being parallel with and 40 feet distant from the above-described northerly and easterly side lines.

For further identification of this description and location, reference is hereby made to a plan and profile of Vale Road, Reading, Mass., made under date of November, 1929 by the Board of Public Works, Reading, Mass., and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement. No betterments are to be assessed for this improvement.

They laying out so made by us we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named Vale Road.

SAMUEL, H. DAVIS
HAROLD W. PUTNAM
MARTIN B. HARTSHORN
WILLIAM T. FAIRCLOUGH
Board of Public Works
February 28, 1930

Article 16. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Bond Street, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works, and heretofore known as Bond Street, or what it will do in relation thereto.

Board of Public Works

Article 16. On motion of Samuel H. Davis, it was voted to accept the following layout of Bond Street.

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof and of a hearing thereon and having met at the time and place appointed for such hearing and then and there heard all persons present who desired to be heard, have laid out as a town way for the use of the town running northerly from Vine Street, substantially in the location of the private way known as "Bond Street".

The boundaries and measurements of said way as so laid out are as follows:

The easterly line of said Bond Street commences at a bound set on the northerly line of said Vine Street, said bound being S. 77 degrees and 26' W. a distance of 246.89 feet from a stone bound set at the northerly corner of Vine and High Streets.

From thence the said easterly line runs with a curve to the right on a radius of 20 feet a length of 31.42 feet to a bound at a point of tangent;

Thence north 12 degrees and 34' W. a distance of 460.23 feet through land of Frank M. Merrill to the wall at land of Martin B. Hartshorn, Administrator, and to the end of this layout.

The westerly line of said Bond Street is parallel with and forty feet distant from the above-described easterly line.

For further identification of this description and location, reference is hereby made to a plan and profile of Bond Street, Reading, Mass., surveyed by Davis and Abbott, Civil Engineers, dated, June, 1929, and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public way and named Bond Street.

SAMUEL, H. DAVIS HAROLD W. PUTNAM MARTIN B. HARTSHORN WILLIAM T. FAIRCLOUGH Board of Public Works February 28, 1930

Article 4. Theodore P. Berle moved to reconsider this Article.

The Moderator decided that according to the by-law it was not in order, therefore the motion was tabled.

Article 17. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Hunt Street, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works, and heretofore known as Hunt Street, or what it will do in relation thereto.

Board of Public Works

Article 17. On motion of Samuel H. Davis, it was voted to accept the following layout of Hunt Street.

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof, and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons present who desired to be heard, have laid out as a town way for the use of the Town running northerly from Vine Street substantially in the location of the private way known as Hunt Street. The boundaries and measurements of said way as so laid out are as follows:

The westerly line of said Hunt Street commences at a point on the northwesterly angle of said Vine Street, said point being N. 12 degrees, 48' and 00" W. a distance of 151.93 feet from a stone bound set at another angle of said Vine Street, and on an extension across said Hunt Street of the northerly line of Vine Street which runs westerly from High Street.

From thence the westerly line runs on a bearing of N. 12 degrees, 30' and 00" W. a distance of 444.16 feet to the end of this layout at land of Martin B. Hartshorn.

The easterly line of said Hunt Street is parallel with and forty feet distant from the above-described westerly line.

For further identification of this description and location, reference is hereby made to a plan and profile of Hunt Street, Reading, Mass., surveyed by Davis and Abbott, Civil Engineers, dated, August, 1929 and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named "Hunt Street."

SAMUEL, H. DAVIS
HAROLD W. PUTNAM
MARTIN B. HARTSHORN
WILLIAM T. FAIRCLOUGH
Board of Public Works
February 28, 1930

Article 18. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Hampshire Road, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works and heretofore known as Hampshire Road, or what it will do in relation thereto.

Board of Public Works

Article 18. Laying out of Hampshire Road.

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then

and there heard all persons present who desired to be heard, have laid out as a town way for the use of the Town running easterly from Main Street substantially in the location of the private way known as Hampshire Road. The boundaries and measurements of said way as so laid out are as follows:

The northerly or left side line of said Hampshire Road commences at a point on the easterly side line of Main Street having a radius of 1,240 feet a distance of 65.47 feet from the point of curvature on the easterly side of Main Street at station 124-15-58 as defined by the alteration of and layout as a State highway by the Department of Public Works, March 5, 1929. From thence the northerly or left side line runs by a curve in a southeasterly direction having a radius of thirty feet, a length of 36.67 feet to a point of tangent;

Thence S. 72 degrees and 41' E. a distance of 152.19 feet to a point of curve:

Thence with a curve to the right with a radius of 146.78 feet a length of 129.59 feet to a point of tangent;

Thence S. 22 degrees and 06' E. a distance of 191.16 feet to a point of curve;

Thence with a curve to the left with a radius of 564.34 feet a length of 160.90 feet to a point of compound curvature, said point being station 6-36-03, Hampshire Road and station 11-96-86, Lawrence Road. Courses as described above run through lands of Frank K. Black and Dora Black also Dana Barber.

The southerly or right side line of Hampshire Road commences at a point on the easterly side line of Main Street, said point being S. 5 degrees, 03' and 30" E. a distance of 28-65 feet from the point of curvature on the easterly side of Main Street at station 124-15-58 as defined by the alteration and layout as a State highway by the Department of Public Works, March 5, 1929.

From thence the said southerly or right side line runs by a curve in a northeasterly direction having a radius of 20.00 feet a length of 39.28 feet to a point of tangent;

Thence S. 72 degrees and 41' E. a distance of 127.78 feet to a point of curve, running by lands of Florence E. Bulley and Frederick F. Dacey.

From thence the said southerly or right side line is parallel with and forty feet distant from the above described northerly or left side line and runs for the remainder of its length by lands of Frederick F. Dacey and Frank K. and Dora Black. For further identification of this description and location reference is hereby made to a plan and profile of Hampshire Road, Reading, Mass., surveyed by Davis and Abbott, Civil Engineers, dated, May, 1929 and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named Hampshire Road.

SAMUEL H. DAVIS
HAROLD W. PUTNAM
MARTIN B. HARTSHORN
WILLIAM T. FAIRCLOUGH
Board of Public Works
February 28, 1930

On motion of Samuel H. Davis, it was voted to accept and adopt the recommendations of the Board of Public Works on the Iaying out of Hampshire Road.

Article 19. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Virginia Road, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works, and heretofore known as Virginia Road, or what it will do in relation thereto.

Article 19. Laying out of Virginia Road.

The Board of Public Works of the Town of Reading having determined and adjudged that common cenvenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of the land thereof, and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons who desired to be heard, have laid out as a town way for the use of the town running easterly from Indiana Avenue substantially in the location of the private way known as Virginia Road. The boundaries and measurements of said way as so laid out are as follows:

The northerly line of said Virginia Road commences at a stone bound at a point of curve on the easterly side line of said Indiana Avenue at a point in lot 38 as shown on a plan of lots in Reading Realty Trust, dated, June, 1928, and to be recorded in the Land Court;

From thence the said northerly line runs with a curve to the left on a radius of 20.00 feet a length of 29.32 feet to a point of tangent;

Thence S. 83 degrees, 49' and 20" E. a distance of 633.01 feet to a point in the stone wall by land of the estate of George R. D. Walker and at the end of this layout.

The southerly line of said Virginia Road is parallel with and forty feet distant from the above-described northerly line.

For further identification of this description and location, reference is hereby made to a plan and profile of Virginia Road, Reading, Mass., surveyed by Davis and Abbott, Civil Engineers, dated, June, 1928, and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named, Virginia Road.

SAMUEL, H. DAVIS
HAROLD W. PUTNAM
MARTIN B. HARTSHORN
WILLIAM T. FAIRCLOUGH
Board of Public Works
February 28, 1930

On motion of Samuel H. Davis, it was voted to accept and adopt the recommendations of the Board of Public Works on the Iayout of Virginia Road.

Article 20. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Weston Road, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works, and heretofore known as Weston Road, or what it will do in relation thereto.

Board of Public Works

Article 20. Laying out of Weston Road.

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a Town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons present who desired to be heard, have laid out as a Town way for the use of the Town running easterly from Bancroft Avenue substantially in the location of the private

way known as Weston Road. The boundaries and measurements of said way as so laid out are as follows:

The northerly line of said extension commences at a stone bound set on the easterly side line of a town way known as Bancroft Avenue the same being on a curved line of 728.62 feet radius in said easterly line, and runs N. 72 degrees, 59' and 10" E. a distance of 206.00 feet to another stone bound set at the northwesterly corner of said Weston Road, and a private way known as Edgewood Avenue, and at the end of this layout.

The northeasterly corner of said Weston Road and Bancroft Avenue is hereby rounded with a curve of 20.00 feet radius and length of 27.34 feet over land of Robert M. Brown, and the said northwesterly corner of Edgewood Avenue is hereby rounded with a curve of 20.00 feet radius and length of 29.93 feet over land of Harry D. Stokes.

The said northerly line as above described is parallel with and five tenths of a foot northerly of the northerly line of said plan of Weston Road as approved under date of April 13, 1928.

The southerly line of said extension is parallel with and forty feet distant from the above-described northerly line and commences at a stone bound set on the said easterly line of Bancroft Avenue, the same being on a curved line of 512.56 feet radius in said easterly line, and runs a distance of 193.57 feet to another stone bound set on the southwesterly corner of said Edgewood Avenue and Weston Road. The southeasterly corner of said Weston Road and Bancroft Avenue is hereby rounded with a curve of 20.00 feet radius and length of 32.89 feet, both over land of Nellie E. Collins.

For further identification of this description and location, reference is hereby made to a plan and profile of Weston Road, Reading, Mass., surveyed by Davis and Abbott, Civil Engineers, dated, December, 1928, and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

This laying out so made by us we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named Weston Road.

SAMUEL H. DAVIS
HAROLD W. PUTNAM
MARTIN B. HARTSHORN
WILLIAM T. FAIRCLOUGH
Board of Public Works
February 28, 1830

On motion of Samuel H. Davis, it was voted to accept and adopt

the recommendations of the Board of Public Works on the Iayout of Weston Road.

Article 21. To see what sum the Town will raise and appropriate by borrowing or otherwise, for the purpose of providing tunds for extensions and enlargements of the Municipal Light Plant, or what it will do in relation thereto. Municipal Light Board

Article 21. On motion of Henry R. Johnson, it was voted that there be raised and appropriated for the purpose of extending and enlarging the Municipal Light Plant the sum of \$15,000.00, in addition to the amount which may be available in the Depreciation Fund, to be expended by the Municipal Light Board; and that the Treasurer be, and he hereby is authorized and directed with the approval of the Selectmen, to borrow said sum of \$15,000.00 and to issue therefor bonds or notes of the Town, such bonds or notes to be payable in accordance with the provisions of Chapter 44 of the General Laws and all amendments thereof and additions thereto, so that the whole loan shall be payable in not more than ten years from the date of the first bond or note issued or at such earlier date as the said Treasurer and Selectmen may determine.

YES 127 NO None

and it was declared a two-thirds vote.

Article 22. To see what action the Town will take regarding the installation of additional street lights on the public streets during 1930.

Municipal Light Board

Article 22. On motion of Henry R. Johnson, it was voted that the subject matter of Article 22 be referred to the Municipal Light Board with authority to install such additional street lights as in its judgment are necessary and to make such changes in existing lights as may be advisable, the cost of the same to be paid from the Depreciation Fund.

Article 23. To see if the Town will vote to re-zone the area bounded as follows: Beginning at the intersection of Main Street and Percy Avenue, on the north by Percy Avenue extended to Summer Avenue, on the west by Summer Avenue, on the south by a portion of Summer Avenue to its intersection with Main Street, on the east by Main Street, so that the entire area described above shall be changed from a Multiple Residence District and a Business District to a Single Residence District, or what it will do in relation thereto.

Jesse S. Thorn and others

Article 23. On motion of Jesse S. Thorn, it was voted that the Zoning By-Laws of the Town be amended by re-zoning the area bounded as follows:

Beginning at the intersection of Main Street and Percy Avenue, on the north by Percy Avenue extended to Summer Avenue, on the west by Summer Avenue, on the south by a portion of Summer Avenue to its intersection with Main Street, on the east by Main Street so that the entire area described above shall be changed from a multiple residence district and a business district to a single residence district.

YES 123 NO None

and it was declared a two-thirds vote.

Article 24. To see if the Town will vote to re-zone the area now included in a business district lying east of the portion of South Main Street between the southwest corner of land of Robert D. Lowell, 101 Main Street, on the North and the intersection of Summer Avenue and Main Street on the south so that the said area shall be changed from a business district to a single residence district, or what it will do in relation thereto.

Jesse S. Thorn and others

Article 24. On motion of Jesse S. Thorn, it was voted that the Zoning By-Laws of the Town be amended by re-zoning the area now included in a business district lying east of the portion of South Main Street between the southwest corner of land of Robert D. Lowell, 101 Main Street on the north and the intersection of Summer Avenue and Main Street on the south so that the said area shall be changed from a business district to a single residence district.

YES 129 NO None

and it was declared a two-thirds vote.

Article 25. To see if the Town will raise and appropriate the sum of four hundred dollars (\$400.00) for the cost of preparing and printing the revised building laws and regulations, or what it will do in relation thereto.

Special Committee on Building Laws

Article 25. On motion of Elias B. Currell, it was voted to raise and appropriate the sum of four hundred dollars for the cost of preparing and printing the revised building laws and regulations.

Article 26. To see if the Town will vote to appropriate from the Cemetery Reserve Fund, received from the sale of lots and graves in Laure! Hill Cemetery, the sum of twenty-five hundred dollars (\$2,500.00) for permanent development of Laurel Hill Cemetery.

Board of Cemetery Trustees

Article 26. On motion of Philip H. Tirrell, it was voted that the Town appropriate from the Cemetery Reserve Fund received from the sale of lots and graves in Laurel Hill Cemetery, the sum of twenty-five hundred dollars for permanent development of Laurel Hill Cemetery.

Article 28. To see what sum the Town will raise and appropriate by borrowing or otherwise, for the purpose of the rearrangement and improvement of Reading Common and the improvement of traffic control, including such construction, reconstruction, extension and widening of streets, laying and construction of pavements and sidewalks, and other construction and works as may be called for, or what it will do in relation thereto.

Planning Board

Article 28. On motion of Samuel H. Davis, it was voted to indefinitely postpone this article.

Article 29. To see if the Town will vote to establish a public domain to be held as a town forest and devoted to the culture of forest trees and to authorize the Board of Selectmen to take for that purpose by eminent domain a tract or tracts of land in the northerly part of the town composed principally of certain parcels of land in Hundred Acre Meadow, so-called, a parcel in Great Island, so-called, and a parcel north of Grove Street, which said parcels have been taken by the Town for taxes in prior years and to see what sum, if any, the Town will raise and appropriate to pay the expense of such taking or takings, including examinations of title, surveys, damages and the like and for the maintenance and development of such town forest, or what it will do in relation thereto.

#### Committee on Re-forestation

Article 29. On motion of L. G. Bent, it was voted that the Town establish a public domain to be held as a town forest and devoted to the culture of forest trees and to authorize the Board of Selectmen to take for that purpose by eminent domain a tract or tracts of land in the northerly part of the Town composed principally of certain parcels of land in 100-Acre Meadow, so-called, described as follows:

One lot of 9 acres bounded as follows:

Northerly by the Ipswich River, easterly by land of Kernan and Ball, southerly by land of Theron Parker's heirs and Daniel Nichols' heirs, and westerly by the Ipswich River or however the same may be bounded or described;

One lot of 5-3/4 acres bounded as follows:

Northerly by the Ipswich River; easterly by land of Daniel Nichols' heirs and Kernan and Ball; southerly by land formerly of Tibbetts; westerly by land formerly of John Burrill or howsoever the same may be bounded or described.

One lot of 17-3/4 acres north of Grove Street bounded as follows:

Northerly by land of Daniel Nichols' heirs, James A. Bancroft and Isaac Clark's heirs; easterly by M. E. Nichols' heirs; southerly by land formerly of Tibbetts; westerly by land of Kernan and Ball or however the same may be bounded or described.

One lot of 50 acres in Great Island, so-called, bounded as follows:

Northerly by land formerly of Taylor, and land formerly of Batchelder and Daniel Nichols' heirs; easterly by land of J. Adams Emerson's heirs, Isaac Wyman, J. G. Hutchinson, Henry Cook and Town of Reading; southerly by land of Isaac Wyman, Solon Bancroft's heirs and Theron Parker's heirs; westerly by land formerly of Kernan and Ball and the Ipswich River or however the same may be bounded or described, which said parcels have been taken by the Town for taxes in prior years, and such other parcels of land adjacent to the above-described property as may be taken, and that the sum of \$1,500.00 be raised and appropriated to pay the expense of such taking or takings including examination of titles, surveys, damages and the like and for the maintenance and development of such Town forest.

YES 124 NO None

and it was declared a two-thirds vote.

Article 30. To see if the Town will vote to authorize the sale to the Old South Methodist Episcopal Church of Reading of approximately 735 square feet of land adjoining the Church property on the Northerly side of Salem Street, or what it will do in relation thereto.

Miles C. Higgins and others

Article 30. On motion of Arthur H. Choate, it was voted that the Selectmen be and they hereby are authorized and instructed to sell to the Old South Methodist Episcopal Church on such terms and conditions as they may determine, a certain parcel of Iand on the Northerly side of Salem Street in the Town of Reading, bounded and described as follows:

Beginning at a stone bound at the point of intersection of the westerly line of Main Street and the northerly line of Salem Street, situated in the Town of Reading, Massachusetts, thence running westerly along the northerly line of Salem Street 105.1 feet by land of the Old South Methodist Episcopal Church to land of said Town of Reading; thence running southerly seven feet by land of Town of Reading and at right angles to the northerly line of Salem Street; thence running easterly by land of Town of Reading 103.37 feet and parallel to the northerly line of Salem Street; thence running northerly along the westerly line of Main Street 7.21 feet to point of beginning, being land now owned by the Town of Reading and containing 729.6 square feet.

And that the Selectmen be and they are hereby authorized, empowered and instructed to sign, seal, acknowledge and deliver a deed in the name and in behalf of the Town of Reading, conveying the said land to the Old South Methodist Episcopal Church of Reading.

Article 31. To see if the Town will vote to accept Chapter 337 of the Acts of 1921, an Act relative to the retirement and pensioning of members of Fire Departments in cities and towns, amending Chapter 32 of the General Laws so that retirement and pensioning of firemen in towns shall apply to call members of its Fire Department, or what it will do in relation thereto.

O. O. Ordway and others

Article 31. On motion of Orville O. Ordway, it was voted that the Town accept Chapter 337 of the Acts of 1921, an Act relative to the retirement and pensioning of members of the Fire Departments in cities and towns, amending Chapter 32 of the General Laws, so that retirement and pensioning of firemen in towns shall apply to call members of its Fire Department.

YES 123 NO None

and it was declared a two-thirds vote.

Article 32. To see if the Town will raise and appropriate the sum of four hundred dollars (\$400.00) for Child Welfare Work, to be expended under the direction of the Reading Visiting Nurse Association and the Board of Health, or what it will do in relation thereto.

Inez H. Damon and others

Article 32. On motion of Josephine L. Fowler, it was voted to raise and appropriate the sum of four hundred dollars for Child Welfare work to be expended under the direction of the Reading Visiting Nurse Association and the Board of Health.

Article 33. To see if the Town will raise and appropriate the sum of two hundred dollars (\$200.00) and authorize the Selectmen to appoint a director, the money to be expended by and the director to serve in cooperation with the Middlesex County Trustees for County Aid to Agriculture in the work of the Middlesex County Extension Service, under the provisions of Section 40 to 45, Chapter 128, General Laws.

Rolland L. Perry and others

Article 33. On motion of Rolland L. Perry, it was voted that the Town raise and appropriate the sum of two hundred dollars, and that the Selectmen appoint a director, the money to be expended by and the director to serve in cooperation with the Middlesex County Trustees for County Aid to Agriculture in the work of the Middlesex County Extension Service under the provisions of Section 40-45, Chapter 128, General Laws.

Article 2. On motion of Charles F. Trevor, it was voted to take Article 2 from the table.

Charles F. Trevor made a report on the collection of ashes and debris without recommendation.

On motion it was voted to refer the subject matter of the

collection of ashes and debris to the Board of Selectmen for further investigation.

On motion of Amos McLean, Chairman of the Hospital Committee, it was voted that the Committee report at the next Special Town Meeting.

Voted to lay Article 2 on the table.

Article 34. To see if the Town will vote to authorize and empower Preston F. Nichols, Treasurer of the Town of Reading, to execute and deliver to Ruth B. Nelson and Dewey Nelson, as tenants by the entirety, a release of the interest which the Town of Reading now has in and to certain parcels of land situated on Main Street and Knollwood Road in said Reading and being lots numbered 57 to 63 both inclusive, and lots 68 to 75 both inclusive, as shown on Town Plan recorded in the office of the Assessors of the Town of Reading, Plan 53, and being the same premises described as lots 5 to 11 both inclusive and lots 20 to 27 both inclusive, as shown on a Plan of Knollwood, Reading, Massachusetts, by James A. Bancroft, dated October, 1920 and recorded with Middlesex South District Deeds, Plan Book 351, Plan 8, and being the same premises assessed on April 1, 1927, to Charles P. Stockwell and taken by the Town of Reading for nonpayment of taxes by deed dated November 9, 1928, and recorded with Middlesex South District Deeds, Book 5300, Page 370, upon the payment of the amount due the Town on said lots, including expenses, or what it will do in relation thereto. Dewey Nelson and others

Article 34. On motion of Dewey Nelson, it was voted to authorize and empower Preston F. Nichols, Treasurer of the Town of Reading, to execute and deliver to Ruth B. Nelson and Dewey Nelson as tenants by the entirety, a release of the interest which the Town of Reading now has in and to certain parcels of land situated on Main Street and Knollwood Road in said Reading and being lots 68 to 75, both inclusive, as shown on Town Plan recorded in the office of the Assessors of the Town of Reading, Plan 53, and being the same premises described as lots 5 to 11, both inclusive, as shown on a Plan of Knollwood Road, Reading, Mass., by James A. Bancroft, dated, October, 1920, and recorded with Middlesex South District Deeds, Book 351, Plan 8, and being the same premises assessed on April 1, 1927 to Charles P. Stockwell and taken by the Town of Reading for nonpayment of taxes by deed dated, November 9, 1928 and recorded with Middlesex South District Deeds, Book 5300, Page 370, upon the payment of the amount due the Town on said lots including expenses.

> YES 133 NO None

Article 35. To see if the Town will provide for the appointment of a committee to report at any subsequent town meeting upon a suitable location and approximate costs of developing and equipping an athletic field in the Town of Reading, and to see how much money the Town will raise and appropriate for the use of such committee, or what it will do in relation thereto.

#### H. Raymond Johnson and others

Article 35. On motion of H. Raymond Johnson, it was voted that a committee of five be appointed by the Moderator to report at any subsequent Town Meeting upon a suitable location and approximate costs of development and equipping an athletic field in the Town of Reading, and that the sum of \$500.00 be raised and appropriated for the use of said committee.

Article 36. To see if the Town will authorize and instruct the Board of Selectmen to renew the present lease for suitable headquarters for Reading Post No. 62 of the American Legion, for a further term of one year, and will raise and appropriate therefor the sum of one thousand dollars, (\$1,000.00) or what it will do in relation thereto.

Forest H. Bryant and others

Article 36. On motion of Forest H. Bryant, it was voted that the Board of Selectmen be and they hereby are authorized, empowered and directed to renew or extend the present lease providing for suitable quarters for Reading Post No. 62 of the American Legion for a further term of one year, and to sign and execute said renewal or extension thereof in the name and behalf of the Town of Reading, and that the sum of one thousand dollars be and hereby is raised and appropriated therefor as rent for such premises.

Article 38. To see if the Town will vote to request the officials in charge of the various public buildings to have the ashes taken from such buildings dumped on Libby Avenue.

Arthur A. Gilmet and others,

Article 38. On motion of Leon G. Bent, it was voted to request the officials in charge of the various public buildings to have the ashes taken from such buildings and dumped on Libby Avenue.

Article 2. On motion of Charles F. Trevor, it was voted to take Article 2 from the table.

On motion of Charles F. Trevor, it was voted to accept the Report of Town Officers as printed and the Report of the Finance Committee.

Article 3. On motion of Louis Ellenwood, it was voted to take Article 3 from the table.

On motion of Louis Ellenwood, it was voted that the Board of Selectmen and all other town departments give preference to our townspeople and a clause to that effect be incorporated in all contracts let by town officials.

On motion of Charles F. Trevor, it was voted to adjourn sine die.

MILLARD F. CHARLES, Town Clerk

#### STATE PRIMARY

Security Hall, Woburn St., Sept. 16, 1930

Pursuant to the warrant and the Constable's return thereon, a Primary was held at the time and place therein specified and was called to order by the Chairman of the Board of Selectmen, Charles F. Trevor. The warrant was duly read, the ballot boxes duly examined and the keys thereof delivered to the Constable in charge, James W. Sias. The polls were duly declared open and were duly closed with the following result:

#### REPUBLICAN PARTY

#### Governor Frank G. Allen, Norwood 2018 John D. Devir, Malden 86 Blanks 101 Lieutenant Governor William Sterling Youngman, Boston 1954 Blanks 231 Secretary Frederick W. Cook, Somerville 1923 Blanks 282 Treasurer James William Bean, Cambridge 292 Fred Jefferson Burrell, Medford 449 Charles Lawrence Burrill, Boston 415 Russell D. Chase, Longmeadow 268 Ezra D. Whitaker, North Adams 54 George B. Willard, Brookline 162 John W. Withington, Dedham 54 Russell Abner Wood, Cambridge 121 Blanks 390 Auditor Joseph N. Carriere, Fitchburg 470 Alonzo B. Cook, Boston 1463

272

Blanks

Attorney-General Joseph E. Warner, Taunton 1901 Blanks 304 Senator in Congress William M. Butler, Boston 1252 Eben S. Draper, Hopedale 807 Andrew Joseph Gillis, Newburyport 49 Blanks 97 Congressman, 5th District 2023 Edith Nourse Rogers, Lowell Blanks 182 Councillor, 6th District Joseph O. Knox, Medford 669 George E. Marchand, Lowell 80 Walter Perham, Chelmsford 632 George W. Pratt, Somerville 300 Blanks 524 Senator, 7th Middlesex District John F. Brown, Bedford 222 1095 Joseph R. Cotton, Lexington Alice F. D. Pearson, Lowell 597 Blanks 291 Representatives, 18th Middlesex District Frederick H. Bowser, Jr., Woburn 680 Norman L. Duncan, Woburn 795 Louis Ellenwood, Reading 1182 Harold F. Parker, Reading 849 Charles F. Trevor, Reading 429 Blanks 475 District Attorney, Northern District 1049 Warren L. Bishop, Wayland Kenneth C. Dunlop, Newton 251 615 George Stanley Harvey, Malden Register of Probate and Insolvency 1816 Loring P. Jordan, Wakefield 389 Blanks County Commissioner, Middlesex County Erson B. Barlow, Lowell 1444 289 John Ernest Quigley, Everett Blanks 472

Associate Commissioners, Middlesex County Daniel D. Gorman, Somerville 463 John M. Keyes, Concord 1274 Melvin G. Pogers, Tewksbury 1310 Blanks 1363 County Treasurer Charles E. Hatfield, Newton 1720 Blanks 485 State Committee, 7th Middlesex District Mary F. Daniel, Reading 1577 Blanks 628 Delegates to State Convention 1828 Arthur S. Cook, Reading Annie E. Patrick, Reading 1796 Louise B. Maxwell. Reading 1777 Edward B. Eames, Reading 1775 1815 Edward E. Harnden, Reading Louis Davis, Reading 1782 Ruth W. Currier, Reading 1757 Arthur S. Nesmith, Reading 1770 Robert H. Hodson, Reading 1812 Laura S. Gordon, Reading 1781 1757 Charles E. Tasney, Reading Mae A. Tanner, Reading 1779 Town Committee 1751 Mary F. Daniel, Reading Annie E. Patrick, Reading 1733 Louis Ellenwood, Reading 1812 1754 Arthur S. Cook, Reading 1764 Harold F. Parker, Reading Edward B. Eames, Reading 1715 Louis Davis, Reading 1726 Louise B. Maxwell, Reading 1715 Katherine G. Howard, Reading 1719 Edward E. Harnden, Reading 1744 Ruth W. Currier, Reading 1705 Arthur S. Nesmith, Reading 1712 Robert H. Hodson, Reading 1753 Myrtle L. Leman, Reading 1678 Jenny F. Weeks, Reading 1705 Blanks 7071

# DEMOCRATIC PARTY

#### Governor

John J. Cummings, Boston Joseph B. Ely, Westfield John F. Fitzgerald, Boston Blanks	79 75 4
Lieutenant Governor	
Strabo V. Claggett, Newton John F. Malley, Newton Charles S. Murphy, Worcester Michael C. O'Neill, Everett Blanks	51 34 20 48 16
Secretary	
Arthur G. Flynn, Revere Chester J. O'Brien, Boston Joseph Santosuosso, Boston Blanks	45 56 39 39
Treasurer	
John H. Dorsey, Boston Charles F. Hurley, Cambridge Fred H. Rourke, Lowell Blanks	24 74 32 39
Auditor	
Francis X. Hurley, Cambridge Francis J. O'Gorman, Boston Jerome J. Shea, Greenfield Blanks	60 33 29 47
Attorney-General	
Henry P. Fielding, Boston William R. Scharton, Reading Harold W. Sullivan, Boston Blanks	18 93 39 19
Senator in Congress	
Marcus A. Coolidge, Fitchburg Eugene N. Foss, Boston Peter J. Joyce, Boston Thomas C. O'Brien, Boston	63 14 4 26
Joseph F. O'Connell, Boston Blanks	45 17

# Congressman, 5th District

Joseph M. Halloran, Lowell	109
Blanks .	60
Councillor, 6th District	
John H. Connor, Lowell Edward J. Coughlin, Somerville Perina J. Delorey, Everett Jeremiah F. McGrath, Somerville	48 27 15 25
Blanks	55
Senator, 7th Middlesex District	
Rena M. Colson, Wakefield John J. Gilbride, Lowell	72 52
Blanks	45
Representatives in General Court,	
18th Middlesex District	
Bernard J. Flaherty, Woburn Patrick J. Foley, Woburn Edward G. Quinlan, Reading	49 61 114
Blanks	114
District Attorney, Northern District	
James J. Bruin, Lowell John F. Daly, Cambridge Charles H. McGlue, Cambridge Blanks	20 58 41 50
Register of Probate and Insolvency,	
Middlesex County	
John J. Butler, Wakefield Blanks	121 48
County Commissioner, Middlesex County	
Robert F. Donavan, Somerville Joshua T. Nowell, Melrose John Ernest Quigley, Everett	57 32 29
Blanks	51

# Associate Commissioners, Middlesex County

E. Perry Johnson, Arlington	91
John J. Norean, Jr., Somerville	80
Blanks	167
Treasurer, Middlesex County	
J. Frank Facey, Cambridge	59
Charles E. Hatfield, Newton	45
Blanks	65
Dialiks	03
State Committee, 7th Middlesex District	
James A. Manning, Lowell	95
Blanks	74
Delegates to State Convention	
James H. Fleming, 18 Green St.	115
George F. A. McDougall, Layfayette Road	111
Millard F. Charles, 66 Bancroft Ave.	114
Margaret A. Canty, 39 Mineral St.	124
Joseph C. Schimpfke, 123 West St.	108
Catherine E. Reilly, 19 Middlesex Ave. Ext.	119
Joseph P. Maguire, 15 Locust St.	111
Frank E. Gray, 91 Middlesex Ave.	127
Irene F. Donahue, 4 Minot St.	113
Blanks	579
Town Committee	
Margaret A. Canty, 39 Mineral St.	24
John J. Carney, 19 Park Ave.	22
Millard F. Charles, 66 Bancroft Ave.	25
James H. Fleming, 18 Green St.	26
James E. Lewis, 10 Park St.	20
Owen McKenney, 116 John St.	21
Edward G. Quinlan, 23 Oak St.	23
Catherine E. Reilly, 19 Middlesex Ave. Ext.	23
James A. Waters, 9 Chute St.	22
Mary J. Weafer, 163 High St.	20
Blanks Whole number Democratic votes	1460 169
Whole number Republican votes	2205
	2203
Total vote Republican and Democratic	2374
- Landan and Demonstration	

The vote was declared in open town meeting with the foregoing result.

MILLARD F. CHARLES, Town Clerk

#### STATE ELECTION

Security Hall, Woburn St., Nov. 4, 1930

Pursuant to a warrant duly issued and the Constable's return, thereon, a State Election was held at time and place therein mentioned and was called to order by the Chairman of the Selectmen, Charles F. Trevor. The ballot boxes were examined and found empty and the keys delivered to the Constable in charge, James W. Sias. The polls were duly opened and it was voted to close the polls at 6.30 o'clock P. M. at which time they were duly closed with the following result. Whole number of ballots cast was 3646 divided as follows:

#### Governor

Governor	
John W. Aiken of Chelsea	45
Frank G. Allen of Norwood	2738
Harry J. Canter of Boston	4
Joseph B. Ely of Westfield	828
Alfred Baker Lewis of Cambridge	10
Blanks	26
Lieutenant Governor	
Strabo V. Claggett of Newton	784
Maria C. Correia of New Bedford	3
Stephen J. Surridge of Lynn	14
Edith M. Williams of Brookline	15
William Sterling Youngman of Boston	2696
Blanks	134
Secretary	
Daniel T. Blessington of Somerville	8
Frederick W. Cook of Somerville	2745
Albert Sprague Coolidge of Pittsfield	48
James W. Dawson of Boston	3
Chester J. O'Brien of Boston	707
Blanks	135
Treasurer	
Fred Jefferson Burrell of Medford	2125
Eva Hoffman of Boston	8
Charles F. Hurley of Cambridge	1152
Walter S. Hutchins of Greenfield	36
Charles S. Oram of Boston	12

313

Blanks

# Auditor

Alonzo B. Cook of Boston	2521
Harry Fieldman of Springfield	20
Francis X. Hurley of Cambridge	858
Albert Oddie of Brockton	2
Fred F. Oelcher of Peabody	12
Blanks	233
Attorney-General	
Morris I. Becker of Boston	5
John W. Janhonen of Gardner	2
John Weaver Sherman of Boston	20
Harold W. Sullivan of Boston	696
Joseph E. Warner of Taunton	2746
Blanks	177
	1//
Senator in Congress	2504
William M. Butler of Boston	2594
Marcus A. Coolidge of Fitchburg	957
Oscar Kinsalas of Springfield	3
Max Lerner of Worcester	1
Sylvester J. McBride of Watertown	9
Blanks	82
Congressman, 5th District	
Joseph M. Halloran of Lowell	623
Edith Nourse Rogers of Lowell	2911
Blanks	112
Councillor, 6th District	
John H. Connor of Lowell	678
Joseph O. Knox of Medford	2699
Blanks	269
Senator, 7th Middlesex District	
Joseph R. Cotton of Lexington	2708
John J. Gilbride of Lowell	691
Blanks	247
Representatives in General Court, 18th Middlesex District	2587
Frederick H. Bowser, Jr., of Woburn	2488
Norman L. Duncan of Woburn	663
Bernard J. Flaherty of Woburn	557
Patrick J. Foley of Woburn	997
Blanks	77/
District Attorney, Northern District	
Warren L. Bishop of Wayland	2710
John F. Daley of Cambridge	635
Blanks	366

# Register of Probate and Insolvency, Middlesex County

John J. Butler of Wakefield	712
Loring P. Jordon of Wakefield	2630
Blanks	304
Dianks	304
County Commissioner, Middlesex County	
Erson B. Barlow of Lowell	2612
Robert F. Donavan of Somerville	668
Blanks	366
Associate Commissioners, Middlesex County	
E. Perry Johnson of Arlington	623
John M. Keyes of Concord	2432
John J. Norean, Jr. of Somerville	565
Melvin G. Rogers of Tewksbury	2325
Blanks	1347
Dianks	1347
County Treasurer, Middlesex County	
J. Frank Facey of Cambridge	650
Charles E. Hatfield of Newton	2526
Blanks	470
Proposed Amendment to Constitution relative to the	
Apportionment of Senatorial, Representative and	
Councillor Districts	
Yes	1465
No	479
Blanks	1702
	1,00
Repeal of Baby Volstead Act. Shall Chapter 138, Section 2A be Stricken Out?	
	1000
Yes	1282
No	1997
Blanks	367
Law Restricting Trapping and Kind of Traps a Trapper	
can use. Amendment to Chapter 131 by inserting	
Section 59 A	
	2055
Yes	2055
No	887
Blanks	700
A	

A true record. Attest.

MILLARD F. CHARLES, Town Clerk

#### SPECIAL TOWN MEETING

Security Hall, Woburn St., Dec. 1, 1930

Pursuant to a warrant duly issued with the Constable's return thereon, a town meeting was held at the place and time mentioned therein and was called to order by the Moderator, Charles P. Howard. The warrant was partially read by the Town Clerk when it was moved by Charles F. Trevor to dispense with further reading except the Constable's return and it was so voted. The Constable's return was then read and the meeting duly opened.

Article 1. To hear and act on the reports of town officers and special committees and determine what instructions will be given Town officers and special committees.

Article 1. On motion of Charles F. Trevor it was voted to lay this article on the table.

Article 2. To see if the Town will appropriate from the Excess and Deficiency Account the following sums. Four thousand five hundred dollars for aid, board and care. Five hundred dollars for temporary aid, or what it will do in relation thereto.

Board of Public Welfare

Article 2. On motion of Mary F. Daniel, it was voted that four thousand five hundred dollars be appropriated from the Excess and Deficiency Account for aid, board and care and that five hundred dollars be appropriated from the Excess and Deficiency Account for temporary aid and that the Town Accountant be and he hereby is authorized and instructed to transfer said sums to the above-mentioned accounts.

Article 3. To see if the Town will appropriate from Excess and Deficiency Account the sum of twelve hundred dollars for Soldiers' Relief or what it will do in relation thereto.

Board of Selectmen

Article 3. On motion of Charles F. Trevor, it was voted that one thousand two hundred dollars be appropriated from Excess and Deficiency Account for Soldiers' Relief and that the Town Accountant be, and he hereby is authorized and instructed to transfer said sum to the above account.

Article 4. To see if the Town will appropriate from the Excess and Deficiency Account, four hundred fifty dollars for payment of Vocational School Tuition, or what it will do in relation thereto.

Town Accountant

Article 4. On motion of Leon G. Bent, it was voted that four hundred fifty dollars be appropriated from the Excess and Deficiency Account for Vocational School Tuition and that the Town Accountant be, and he hereby is authorized and instructed to transfer said sum to the above account.

Article 5. To see if the Town will appropriate from the Excess and Deficiency Account thirteen hundred dollars for the care of contagious diseases or what it will do in relation thereto.

Board of Health

Article 5. On motion of Leon G. Bent, it was voted that one thousand three hundred dollars be appropriated from the Excess and Deficiency Account for the care of contagious diseases, and that the Town Accountant be, and he hereby is, authorized and instructed to transfer said sum to the above account.

Article 6. To see if the Town will appropriate from the Excess and Deficiency Account two thousand dollars for the Reserve Fund or what it will do in relation thereto.

Finance Committee

Article 6. On motion of Robert B. Mount, it was voted that two thousand dollars be appropriated from the Excess and Deficiency Account for the Reserve Fund and that the Town Accountant be, and he hereby is, authorized and instructed to transfer said sum to the above account.

Article 7. To see if the Town will vote to accept the report of the Committee appointed to revise the Building Laws and will vote to adopt the rules and regulations as a By-Law of the Town or what it will do in relation thereto. Committee on Building Laws

Article 7. On motion of Elias B. Currell it was voted to lay this article on the table.

Article 8. To see if the Town will vote to re-zone the area bounded as follows: Beginning approximately 588.02 feet distant from the northeasterly corner of Main Street and a proposed street called Willard Road; thence running northeasterly along the eastern line of Main Street to Pearl Street; thence southeasterly along the westerly line of Pearl Street to the said proposed street called Willard Road and thence westerly along the northerly line of Willard Road to the point of beginning, so that the entire area described above shall be changed from a Multiple Residence District and a Single Residence District to a Business District, or what it will do in relation thereto.

M. E. Brande and others

Article 8. On motion of George E. Larrabee, it was voted that Article 8 of the Town Warrant and the objections therero filed with the Town Clerk be referred to the Planning Board in accordance with Chapter 39 of the Acts and Resolves of 1929, such board to report at the adjournment of this meeting to be held on the date to be set for the next regular annual business meeting of the Town.

Article 9. To see if the Town will accept a gift of meadow land of approximately two acres situated in Hundred Acre Meadow, so-

called, offered to the Town by Mahlon E. Brande, or what it will do in relation thereto.

Board of Selectmen

Article 9. On motion of Samuel H. Davis, it was voted that the Town accept the gift of land of approximately two acres situated in Hundred Acre Meadow, so-called, offered to the Town by Mahlon E. Brande, the same to be used under the jurisdiction of the Board of Public Works for the development of the water supply.

Article 10. To see if the Town will authorize and instruct the Board of Public Works to sign, seal, acknowledge and deliver in behalf of the Town a release unto Frank M. Merrill of Reading and his successors to title, the grant of easement for drainage purposes in land located on the westerly side of Bond Street acquired by the Town from Frank M. Merrill by instrument dated, July 23, 1929. The said easement being no longer necessary because of the relocation of the drain in Bond Street, now a public way, or what it will do in relation thereto.

Article 10. On motion of Martin B. Hartshorn, it was voted that the Board of Public Works be and it hereby is authorized and instructed to sign, seal, acknowledge and deliver in behalf of the Town a release unto Frank M. Merrill and his successors in title of the easement in land located on the westerly side of Bond Street acquired by the Town from said Frank M. Merrill by instrument dated, July 23, 1929.

Description of easement for Brook through land of Frank M. Merrill off Bond Street.

Beginning at the southeasterly corner of lot ten on a plan here-inafter referred to on the westerly side line of a private way now known as Bond Street and at the northeasterly corner of land of Martin B. Hartshorn, the said easement or way runs S. 77 degrees and 26' W. along the property line of the said Martin B. Hartshorn and Benjamin M. Hartshorn a distance of 145.00 feet to an angle; thence turning at a right angle and running N. 12 degrees and 34' W. through land of Frank M. Merrill a distance of 388.12 feet to the wall at other land of said Martin B. Hartshorn.

Said easement to be ten feet in width and to lie on the northerly side of the first-described course and the easterly side of the second and last-described course. All of the said easements or ways being more fully shown on a plan entitled "Plan showing proposed Relocation of Brook and Easements to the Town of Reading" made under date of June, 1929, by Davis and Abbott, Civil Engineers, Reading, Mass., said plan being a part of this description.

Article 11. To see if the Town will accept a gift of land from the Reading Masonic Temple Corporation and an easement of land of Friend Brothers Realty Trust and Anna Goldberg for the purpose of straightening and widening Main Street between Haven and Woburn Streets, or what it will do in relation thereto.

Board of Public Works

Article 11. On motion of Martin B. Hartshorn, it was voted that the Town accept the gift of land from the Reading Masonic Temple Corporation and an easement in land of Friend Brothers Realty Trust and Anna Goldberg, located on the westerly side of Main Street, between Haven and Woburn Streets, the same to be placed when received, under the jurisdiction of the Board of Public Works.

Description of Land of Reading Masonic Temple Corporation.

Beginning at a stone bound at the junction of Haven and Main Streets; thence running northerly by other land of the Reading Masonic Temple Corporation by two courses, fifty and 06/100 feet and eighty-five and 50/100 feet to land now of Arthur D. Gordon; thence easterly along said Gordon's land five feet to a stone bound on the present line of Main Street; and thence southerly by two courses sixty-two and 29/100 feet and seventy-three and 90/100 feet to a point of beginning. Estimated to contain according to said plan 241 square feet of land more or less. Said strip being as shown upon a plan entitled "Town of Reading, Plan showing lots assessed for Sidewalk Betterments, Main and Haven Streets," dated, August, 1930, which plan was duly recorded in the Middlesex South District Registry of Deeds on August 18, 1930.

Description of land of Friend Brothers Realty Trust.

Beginning at an iron bolt on Main Street at the northeast corner of land of Arthur D. Gordon; thence running northerly along Main Street thirty-nine and 33/100 feet to an iron bolt at the southeast corner of the land of Anna Goldberg; thence turning Westerly by land of Anna Goldberg two and 75/100 feet; thence turning and running southerly by other land of grantors thirty-nine feet to land of Arthur D. Gordon and thence turning and running easterly one foot by Gordon's land to the point of beginning. Estimated to contain 73.5 square feet of land. Said strip being shown on a plan entitled, "Town of Reading. Plan showing lots assessed for Sidewalk Betterments, Main and Haven Streets," dated, August, 1930, and duly recorded in Middlesex South District Registry of Deeds, Plan No. 887—1930.

.Description of Anna Goldberg Land.

Beginning at an iron bolt on Main Street at the northeast corner of the land of Friend Brothers Realty Trust; thence running northerly along Main Street one hundred and five feet to an iron bolt; thence turning and running southerly by other land of said grantor, one hundred five feet to land of Friend Brothers Realty Trust; thence turning and running easterly by land of said Friend Brothers Realty Trust two and 75/100 feet to the point of beginning. Estimated to

contain one hundred and forty-four square feet of land. Said strip being as shown upon a plan entitled, "Town of Reading, Plan showing lots assessed for Sidewalk Betterments, Main and Haven Streets," dated, August, 1930, and duly recorded in Middlesex South District Registry of Deeds as Plan No. 887—1930.

Article 12. To see if the Town will authorize the Board of Public Works to acquire by eminent domain a tract or tracts of land in and about Birch Meadow, so-called, as they may deem suitable for the purpose of a public playground and to see what sum the Town will raise and appropriate to pay the expense of such taking or what it will do in relation thereto.

Board of Public Works

Article 12. On motion of Martin B. Hartshorn, it was voted that the Board of Public Works be and it hereby is authorized to acquire by Eminent Domain, such tract or tracts of land in and about Birch Meadow, so-called, as it may deem suitable for the purposes of a playground and to appropriate for such takings the sum of one hundred dollars by transferring from the unexpended balance of the \$3,000.00 previously raised and appropriated for Birch Meadow by vote of the Town at the annual meeting held in March, 1930. And that the Town Accountant be and hereby is ordered to make this transfer.

Article 13. To see if the Town will vote to accept the Report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Palmer Hill Avenue, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the Public Highway laid out by the Board of Public Works and heretofore known as Palmer Hill Avenue, or what it will do in relation thereto.

Article 13. Laying out of Palmer Hill Avenue.

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a Town way be laid out as and in the location hereinafter described, having complied with all requirements of law retating to notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons who desired to be heard, have laid out as a Town Way for the use of the Town running easterly from West Street substantially in the location of the private way known as Palmer Hill Avenue, the boundaries and measurements of said way as so laid out are as follows:

The northerly side line of said Palmer Hill Avenue commences

at a point on the easterly side line of said West Street, said point being S. 13 degrees, 40' and 00" E. a distance of 93.76 feet from a stone bound set on the said easterly side line of West Street on the division line between lands of Michael Zynsky and one Basse.

From thence the said northerly line runs with a curve to the left on a radius of 20 feet a length of 31.16 feet to a point of tangent;

Thence N. 77 degrees, 04' and 50" E. a distance of 235.10 feet to a point of curve;

Thence with a curve to the left on a radius of 20.24 feet a length of 44.62 feet to a point of tangent on the westerly line of said Longview Road and at the end of this layout.

The southerly side line of said Palmer Hill Avenue is parallel with and forty feet distant from the above-described northerly line.

For further identification of this description and location reference is hereby made to a plan and profile of Palmer Hill Avenue, Reading, Mass., surveyed by Davis and Abbott, Civil Engineers, dated, August, 1929, and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public way and named Palmer Hill Avenue.

MARTIN B. HARTSHORN FRANK M. MERRILL, HAROLD W. PUTNAM WILLIAM T. FAIRCLOUGH Board of Public Works

On motion of Martin B. Hartshorn, it was voted to accept the report of the Board of Public Works and adopt their recommendations on the laying out of the street, Palmer Hill Avenue.

Article 14. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Weston Road, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works and heretofore known as Weston Road, or what it will do in relation thereto.

Board of Public Works

#### Laying out of Weston Road

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity

require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons who desired to be heard, have laid out as a Town Way for the use of the Town running easterly from a private way known as Winthrop Avenue to a Town Way known as Hanscom Avenue, substantially in the location of the private way known as Weston Road. The boundaries and measurements of said way as so laid out are as follows:—

The southerly line of said Weston Road commences at a point on the easterly side line of said Winthrop Avenue, at a Stone Bound, said bound being N. 17°, 59' and 00" W., a distance of 148.55 feet from a stone bound marking an angle in said Winthrop Avenue.

From thence, the said easterly line runs on a course of N. 72°, 59' and 10" E., a distance of 163.75 feet by land of Arthur H. Cook, and land of Mildred George, to the westerly side line of Hanscom Avenue.

The northerly line of said Weston Road is parallel with and forty feet distant from the above described southerly line and starts from a stone bound situated on the easterly line of Winthrop Avenue as aforesaid and runs to the westerly side line of Hanscom Avenue.

The above described lines being more fully shown on a plan entitled Weston Road made by Davis and Abbott, Civil Engineers, Reading, Mass., under date of March, 1928, said plan being a part of this description, and also on a plan of lots belonging to Edwin C. Hanscom made by Clarence E. Carter, C. E., under date of January, 1915.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public way and named Weston Road.

MARTIN B. HARTSHORN FRANK M. MERRILL HAROLD W. PUTNAM WILLIAM T. FAIRCLOUGH Board of Public Works

On motion of Martin B. Hartshorn, it was voted to accept the report of the Board of Public Works and adopt its recommendations.

Article 15. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway

of a private way heretofore known as Hanscom Avenue, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works and heretofore known as Hanscom Avenue or what it will do in relation thereto.

Board of Public Works

#### Laying out of Hanscom Avenue

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons who desired to be heard, have laid out as a Town Way for the use of the Town running northerly from the present terminus of Hanscom Avenue, substantially in the location of the private way known as Hanscom Avenue. The boundaries and measurements of said way as so laid out are as follows:

The easterly side line of said Extension commences at a point 300.00 feet northerly, measured along the easterly side of said Town Way, from a stone bound set at the corner of said Hanscom Avenue and Tower Road, a private way, and said point is on the division line between lots 67 and 68 of a plan of lots in Reading for Edwin C. Hanscom as originally surveyed by Clarence E. Carter, C. E. in January 1915, said plan being duly recorded:

From thence the said easterly line runs in a continuation of the last described course as accepted in 1918 as aforesaid, on a bearing of N. 17°, 00' and 50" W., by land of Alice M. Bell and land of Stanley R. Gerard, a distance of 180.00 feet to a point of curve:

Thence with a curve to the right with a radius of 20.00 feet, a length of 31.42 feet through land of said Gerard to a point of tangent on the southerly side line of said Hartshorn Street, and at the end of this layout.

The westerly line of said Extension is parallel with and forty feet distant from the above described easterly line.

For further identification of this description and location, reference is hereby made to a plan and profile of Hanscom Avenue, Reading, Mass., surveyed by Davis and Abbott, Civil Engineers, dated February, 1930 and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement. No betterments are to be assessed for this improvement.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public way and named Hanscom Avenue.

MARTIN B. HARTSHORN FRANK M. MERRILL HAROLD W. PUTNAM WILLIAM T. FAIRCLOUGH Board of Public Works

On motion of Martin B. Hartshorn, it was voted to accept the report of the Board of Public Works and adopt its recommendations.

Article 16. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Henzie Street such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works and heretofore known as Henzie Street, or what it will do in relation thereto.

Board of Public Works

#### Laying out of Henzie Street

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons who desired to be heard, have laid out as a town way for the use of the Town running easterly from Grove Street, substantially in the location of the private way known as Henzie Street. The boundaries and measurements of said way as so laid out are as follows:

The northerly line of said Henzie Street commences at a point of curve on the easterly side of Grove Street, said point being N. 23°, and 47' W., a distance of 119' from a point which is N. 19° and 18° W., a distance of 154.67 feet from a drill hole in a stone on the southerly property line of the Fathers' & Mothers' Club.

Thence, the northerly line, runs on a curve to the left with a radius of 37.23 feet, a distance of 45.38 feet to a point of tangent;

Thence N. 86°, and 17' E., a distance of 178.61 feet, being only a part of the layout;

The southerly line of said Henzie Street is parallel with and 40 feet distant from the above described northerly line.

For further identification of this description and location, reference is hereby made to a plan and profile of Henzie Street, Reading, Mass., surveyed by Peter V. Cipolla, Civil Engineer, dated April, 1928, and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named Henzie Street.

MARTIN B. HARTSHORN FRANK M. MERRILL HAROLD W. PUTNAM WILLIAM T. FAIRCLOUGH Board of Public Works

On motion of Martin B. Hartshorn, it was voted to accept the report of the Board of Public Works and adopt their recommendations.

Article 17. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way heretofore known as Tower Road, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements and to see if the Town will accept the public highway laid out by the Board of Public Works and heretofore known as Tower Road or what it will do in relation thereto.

Board of Public Works

#### Laying out of Tower Road

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons who desired to be heard, have laid out as a Town Way for the use of the Town running westerly from Hanscom Avenue to Winthrop Avenue, substantially in the location of the private way known as Tower Road. The boundaries and measurements of said way as so laid out are as follows:—

The southerly line of said Tower Road commences at a point of curve on the westerly side line of said Hanscom Avenue said point being N. 17°, 00' and 50" W., a distance of 271.69 feet from a point of tangent in said Hanscom Avenue line.

From thence the said southerly line runs on a curve to the left with a radius of 20 feet, a length of 31.42 feet, across land of Joseph and Eula Van Buskirk, to a point of tangent:

Thence S. 72°, 59' and 10" W., a distance of 160.00 feet by land of said Van Buskirk and land of Donald S. and Theodora Smith, to a point of curve:

Thence on a curve to the left with a radius of 20 feet, a length of 31.42 feet, across land of said Smith, to a point of tangent on the easterly side line of said Winthrop Avenue and at the end of this layout.

The northerly line of said Tower Road is parallel with and forty feet distant from the above described southerly line.

For further identification of this description and location, reference is hereby made to a plan and profile of Tower Road, Reading, Mass., surveyed by Davis & Abbott, Civil Engineers, dated May, 1930, and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named Tower Road.

MARTIN B. HARTSHORN FRANK M. MERRILL HAROLD W. PUTNAM WILLIAM T. FAIRCLOUGH

Board of Public Works

On motion of Martin B. Hartshorn, it was voted to accept the report of the Board of Public Works and adopt their recommendations.

Article 18. To see if the Town will vote to accept the report of the Board of Public Works upon the laying out as a public highway of a private way hereto known as Longview Road, such highway being laid out in accordance with plans duly approved by the Board of Survey and filed in the office of the Town Clerk in accordance with the statutory requirements, and to see if the Town will accept the public highway laid out by the Board of Public Works and heretofore known as Longview Road, or what it will do in relation thereto.

Board of Public Works

#### Laying out of Longview Road

The Board of Public Works of the Town of Reading having determined and adjudged that common convenience and necessity require that a town way be laid out as and in the location hereinafter described, having complied with all requirements of law relating to

notice to the owners of land thereof and of a hearing thereon, and having met at the time and place appointed for such hearing and then and there heard all persons who desired to be heard, have laid out as a Town Way for the use of the Town running northerly from King Street opposite Berkeley Street, and turning easterly by several curved lines of different radii into Prospect Street Extension, substantially in the location of the private way known as Longview Road. The boundaries and measurements of said way as so laid out are as follows:—

The easterly side line of said Longview Road commences at a stone bound at the southerly terminus of the acceptance as a public highway in March, 1927.

Thence by a curve to the left through land of Bessie McLane with a radius of 170.00 feet, a distance of 170.00 feet to a stone bound;

Thence by a curve to the right through land of Besste McLane, with a radius of 133.02 feet, a distance of 121.33 feet to a stake at the end of this acceptance.

The westerly line is parallel to and 40 feet distant from the above described lines through land of Michael J. Zynsky and Albert A. and Minnie L. Phillips.

For further identification of this description and location, reference is hereby made to a plan and profile of Longview Road, Reading, Mass., surveyed by Davis and Abbott, Civil Engineers, dated April, 1926 and by reference made a part of this report.

We determine that no damages will be sustained by any person or persons in their property by reason of the taking to be made for this improvement.

No betterments are to be assessed for this improvement.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named Longview Road.

MARTIN B. HARTSHORN FRANK M. MERRILL HAROLD W. PUTNAM WILLIAM T. FAIRCLOUGH Board of Public Works

On motion of Martin B. Hartshorn, it was voted to accept the report of the Board of Public Works and adopt their recommendations.

Article 19. To see if the Town will vote to accept the report of the Board of Public Works on the relocating or altering of Highland Street and Bancroft Avenue, such highways being relocated or altered in accordance with plans duly approved by the Board of Public Works and filed in the office of the Town Clerk, in accordance with the satutory requirements, and to see if the Town will acept the relocation

or alteration of Highland Street and Bancroft Avenue as shown on said plan, or what it will do in relation thereto.

Board of Public Works

#### Highland Street and Bancroft Avenue

Moved that the Board of Public Works be and hereby is authorized to relocate and alter the easterly side line of Highland Street and Bancroft Avenue commencing at the northeasterly corner of Highland and Auburn Streets:—

Thence the easterly line runs N. 26°, 40' and 30" W., a distance of 50 feet to point of curve:

Thence on a curve to the right with a radius of 56 feet a distance of 20.62 feet to point of tangent:

Thence N. 5°, 34' and 50"  $W_{\rm o}$ , a distance of 54.50 feet to point of curve:

Thence on a curve to the left, with a radius of 520 feet, a distance of 229.86 feet, to a stone bound, which was in the previous layout dated September, 1924.

For further identification of this description and location, reference is hereby made to a plan labelled "Plan showing Relocation of Street Lines on Highland Street and Bancroft Avenue, Reading, Mass.," dated November 1930, surveyed by the Board of Public Works and by reference made a part of this report.

Such highways being relocated or altered in accordance with plan duly approved by the Board of Public Works and filed in the office of the Town Clerk, in accordance with the statutory requirements.

This laying out so made by us, we hereby report to the Town for acceptance and recommend that said way shall thereafter be known as a public town way and named Highland Street and Bancroft Avenue.

MARTIN B. HARTSHORN
FRANK R. MERRILL
HAROLD W. PUTNAM
WILLIAM T. FAIRCLOUGH
Board of Public Works

On motion of Martin B. Hartshorn, it was voted to accept the report of the Board of Public Works and adopt their recommendations.

On motion of George E. Larrabee, it was voted to adjourn to meet on the second Monday in March, 1931.

MILLARD F. CHARLES, Town Clerk

# COMMONWEALTH OF MASSACHUSETTS COUNTY OF MIDDLESEX CITY OF WOBURN

SEAL

In accordance with the provisions of Section 125, Chapter 54 of the General Laws of Massachusetts, of 1921 the City Clerk of Woburn and the Town Clerk of Reading, North Reading, being the City and Town Clerks of every city and town in Representative District number eighteen within said County, met at the City Hall, Woburn, at noon on Friday, November 14 A. D. 1930 being the tenth day succeeding the day of the State Election held on Tuesday, November 4 A. D. 1930 and then and there opened, examined and compared the copies of the records of votes cast at said election for the office of representative, and determined therefrom that Frederick H. Bowser, Jr. of Woburn and Norman L. Duncan of Woburn were elected to the office of Representative.

The following is a schedule of the names of all persons for whom votes for Representative were given in said District and the number of votes given to each person, viz:—

Frederick H. Bowser, Jr. of Woburn	6103
Norman L. Duncan of Woburn	5600
Bernard J. Flaherty of Woburn	3557
Patrick J. Foley of Woburn	2646
Louis Ellenwood	2
John G. Ellison	1

In witness whereof, we the City Clerk of Woburn and the Town Clerks of Reading, North Reading hereunto set our hands this four-teenth day of November, A. D. 1930.

WILLIAM E. KANE, City Clerk, Woburn
MILLARD F. CHARLES, Town Clerk, Reading
HERBERT L. ABBOTT, Town Clerk, North Reading
Clerk's Office

Received and recorded,

#### Attest:

MILLARD F. CHARLES, Town Clerk

# NOTICE TO PARENTS, HOUSEWIVES, PHYSICIANS, AND MIDWIVES

Your Attention is Called to the Sections Below Taken from the Revised

Laws—Blank Forms for Return of Births Can be Obtained of
the Town Clerk

#### SECTION 3, CHAPTER 444, ACTS 1897

Section 3. Physicians and midwives shall on or before the fifth day of each month report to the clerk of each city or town a correct list of all children born therein during the month next preceding, at whose birth they were present, stating the date and place of each birth, the name of the child, if it has any, the sex and color of the child, the name, place of birth and residence of the parents, the maiden name of the mother, and occupation of the father. If the child is illegitimate the name of the father shall not be stated, unless at the joint request in writing of both father and mother, which request shall be filed with the returns of births. The fee of the physicians or midwives shall be twenty-five cents for each birth so reported, and shall be paid by the city or town in which the report is made, upon presentation of certificate from the city or town clerk, stating that said births have been reported in conformity with the requirements of this section. Any physician or midwife neglecting to report such list for ten days after it is due shall for each offence forfeit a sum not exceeding twenty-five dollars.

#### SECTION 6, CHAPTER 444, ACTS 1897

Section 6. Parents and householders shall within forty (40) days after the date of a birth occurring in his house give notice thereof or cause such notice to be given to the clerk of the city or town in which such child is born.

MILLARD F. CHARLES, Town Clerk.

#### **HUNTING AND FISHING LICENSES IN 1930**

256	Sporting	Licenses	(G)	\$2.25			 	 	 	. \$576.	00
22	Trapping	Licenses	@	\$2.25			 	 	 	. 49	50
25	Trapping	Licenses	@	.75c .			 	 	 	. 18.	75
1	Non Resi	dent Spor	rt I	icens	e @	\$2.25	 	 	 	. 2.:	25

304 Licenses @ .25c Town Clerk Fee	. 76.00
Balance due. Fish and Game Commission	\$570.50
The following payments were made:	φονο.οφ
Feb. 10. Paid	\$103.50
March 5, Paid	7.1.1.1.1
April 8, Paid	
May 10, Paid	80.00
June 3, Paid	58.00
July 8, Paid	48.00
Aug. 6, Paid	
Sept. 9, Paid	
Oct. 8, Paid	
Nov. 4, Paid	115.50 46.50
Dec. 5, Paid Jan. 6, 1931	
Jan. 0, 1931	1.50
Total	
	7
•	
DOGS LICENSED THE YEAR 1930	
June 1—1930	
Males Licensed, 372 @ \$2.00	\$744.00
Females Licensed, 58 @ \$5.00	290.00
Kennel Licenses, 2 @ \$25.00	50.00
Th-1.1	M 004 00
Total	, ,
Town Clerk fees, 432 licenses @ 20c	00.40
June 1, 1930 Paid County Treasurer	\$997.60
Males Licensed, 156 @ \$2.00	\$312.00
Females Licensed, 48 @ \$5.00	240.00
A Breeder's License, 1 @ \$50.00	50.00
Kennel License, 1 @ \$25.00	25.00
200 I. O 20	\$627.00
206 Licenses @ 20c	41.20
Dec. 1, 1930 Paid County Treasurer	\$585.80
Total Paid County Treasurer\$  Total Number Licenses issued, 638	1,583.40

-		
Dat	te Name	Parents
Jan	•	
1	Louise Sarah Gaffney	Michael C. and Gertrude H.
2	Jane Hifle Goodwin	Ralph C. and Mary J.
9	Walter David Drew	Edmund F. and Lillian M.
11	Dorothy Marguerite Abbott	Harold W. and Emily G.
13	Catherine Elizabeth	, , , , , , , , , , , , , , , , , , ,
,	D'Entremont	Pius L. and Esther D.
17	Walter Francis White	Adolph and Laura D.
18	Robert Allen Castine	Clarence E. and Kathryn T.
18	Roy Richard Farr	Merle W. and Edna G.
20	Robert Mitchell Muse	Benjamin and Sylvia D.
23	Margaret Julia Muise	John H. and Mary S.
26	Edward Arthur Downs	Edward F. and Phyllis C.
26	Ann Elizabeth Vietor	Carl F. and Elizabeth C.
27	Emery Otis Knight	Alfred S. and Beatrice E.
27	Richard Laurence Zusi	Charles J. and Bertha T.
28	Harry Elmer LeFave	George A. and Mary C.
28	Jerry Albert LeFave	George A. and Mary C.
28	Arthur Edward Osborne, Jr.	Arthur E. and Marian P.
31	Joseph Addison Aldred, Jr.	Joseph A. and Elizabeth P.
Fel		
2	Claire Theresa Roberts	William and Mary Q.
12	Helen Norma Hayter	William D. and Mary M.
14	Robert Stanley McSheehy	George P. and Isabel M.
14	Ruth Elizabeth Smith	Ralph W. and Maud B.
15 20	David Benton Young Carolyn Ann Lawler	Nelson B. and Christine F.  James H. and Elizabeth R.
21	Gerald Francis Folev	William T. and Mabel C.
21	Caroline Marchetti	Hugo H. and Helen W.
22	Elizabeth Ann Dagdigian	Aram and Elsie S.
26	Allen Richard Muise	Sylvine J. and Margaret B.
27	Quentin John Hoyt	Carl H. and Florence D.
28	Agnes Winn	Charles H. and Agnes D.
	3	
Ma	arch	
1		
3	Barbara Eleanor Ballou	Henry and Gertrude S.
5	John Vahae Morookian	Vahran and Alice M.

	•	
Da	te Name	Parents
Ma	rch	
8 19 20 29	William Lindsey Wescott David Robert Barmby Marcia Wilson Virginia ——— Rahberg	Merle W. and Ruth B. Francis and Mildred B. Ralph E. and Ruth A. Francis J. and Violet M.
Ap	r.	
1 5 6	Priscilla Alden Loring Robert Elliott Fowle, Jr.	John A. and Madeline L. Robert E. and Christie W.
7 8 10 11 14	Jean Barbara Carter Donald Chester Stevens Marilyn Jane Parrett Richard Carter Heselton, Jr. Gloria Geane Russell Philip Henry O'Brien	Herbert F. and Lillian H. Chester D. and Beulah P. Charles F. and Ruth R. Richard C. and Dorothy L. John and Mary H. Philip H. and Eva L.
15 16 18 19 22 22 22 22 23 26 26	Paul Fyfe Babcock Gordon Louis Muise Lorraine Fleming Delong Frederick Thomas Burns Robert Bartlett Gibson Francis Addison Kimball John Francis Mahoney James Edward Smalley Gerald Gray  George Elmer Hickman	Ernest G. and Florence F. Lawrence J. and Emily M. Lawrence L. and Margaret F. Frederick T. and Violet M. Robert and Jane B. Walter B. and Marie B. John E. and Frances M. James J. and Elizabeth H. Robert G. and Bertha P.  Ernest S. and Mildred L.
Ma	9-	
2 9 12 14 17 17 17 18 22 26	Thelma Ann Currier Neil O'Brien Mary Alice Drinan Douglas Fenno Goss Haven John Alden Goodwin Elizabeth Lee George Warren Sprague, Jr. Charlotte May Runge Ann Marie Griffin James Edward Desmond	Sidney W. and Thelma A. Raymond E. and Mary D. David J. and Nora C. Franklin K. and Elizabeth C. Harry C. and Anna R. William H. and Mildred C. George W. and Ardell M. Louis B. and Mildred C. John P. and Rosabelle A. Daniel J. and Helen T.

Da	te Name	Parents
Ma	ay	
28 28	Grace Lucy Martin Paul Anselm Surrette	Edward H. and Lucy M. Anselm E. and Bridget D.
Jui	ne	
6 8 16 18 22 25 25	Richard Walker Lally Richard Webster Ham Wanda Eleanor Richardson June Estabrook Mary Elenor Peters Richard Howland Hills	Raymond J. and Marion A. Robert E. and Priscilla W. Thomas J. and Wanda W. Harland B. and Ruth G. Joseph L. and Marie P. Kenneth M. and Ruth A.
Jul	у	
3 8 8 11 12 14 18 19 20 22 24 28 28 28 29 29 31 Aug	Nancy Boyer Chadwick  ———————————————————————————————————	Norman S. and Barbara B. Maurice H. and Doris B. George A. and Bertha G. John J. and Dorothy F. Raymond W. and Doris V. John and Florence D. Gerard R. and Maude P.  Francis G. and Jennie S. Joseph and Janet M. George E. and Edith J. Louis J. and Lena W. Malcolm S. and Frances H. Joseph L. and Gertrude A. Joseph L. and Helen B. Dominick and Mary F. Samuel and Mary A. William T. Jr. and Reatha R. Richard E. and Alta R.
2 4 5	Mary ——— Duffy Sidney Kimball White Judith Alanna DeMatteo	Neal and Eileen R. George A. and Phyllis W.* Benedetto and Madalene G.

Dat	e Nam <b>e</b>	Parents		
Aug	Aug.			
6 12 12 15 16 16 19 21 22 26 28	Clayton Alward Tracy, Jr. Ann Drocey David Richard Paul Livingstone Joan Mary McLaughlin Florence Mildred Doucette Helena Farpelha An 1 Elizabeth Kelly Walter Bruce Johnson Marion Frances Merritt Howard Allison Bussell Pauline Marie Surrette	Clayton A. and Mildred B. Arthur L. and Lois G. Leonard A. and Laura M. Charles and Joan C. Louis A. and Frances M. George and Mary G. John H. and Susan O. Ernest S. and Edna B. Fred W. and Mary F. Howard E. and Paulina R. Paul A. and Susan M.		
Sep	Sept.			
4 5 7 7 12 12 14 14 19 21 25 28 28	Thelma Domin Robert John Doucette James Edward CummIngs Shirley Ellen Nelson Janice Raye Bowman Lois Mazzie Clarkson Charles Lucian Nelson  Walter Freeman White Donald Laurence Thompson Shirley Marion Arnold Leander Irving Davis Joyce Marie White	Alfred W. and Lottie L. Jeremiah and Florence D. Charles L. and Harriet M. Fred W. and Ellen S. Gordon L. and Agnes K. Arnold and Lillian M. Charles L. and Zelda A.  Walter E. and Effie M. Henry I. and Catherine W. Berry W. and Elizabeth D. Henry and Maybelle S. George A. and Margaret Q.		
Oct.				
5	Allan Joseph Roberts Julia Rita Bacigalupo Harriet Bertha Flater John Richard Levasseur Ruth Goulette Wright Shirley Ann Cahill Dorothy Allen Maxwell Daniel Joseph Doran Robert Eugene Gifford Mary Lou Geraldine Ricard	Nicholas J. and Mildred F. Philip L. and Theresa C. Harold M. and Bertha Q. John and Rose D. William C. and Ora G. John J. and Blanche P. Bernard L. and Ruth A. Daniel and Mary M. Frank A. and Blanche R. 'M Uniph pur 'M Maileapoy		

Date Name	Parents
Oct.	
10 Elizabeth Harrison	John W. and Bertha W.
16 John Morton Raymond, Jr.	John M. and Winifred T.
19 Walter Anselm Arsenault	John R. and Mary D.
19 Cora May Luce	Carlton A. and Cora O.
20 Barbara Ann Dacey	Cornelius J. and Mary M.
20 Barbara Ann Sherrod	James L. and Anna W.
22 Janet Doris Bedley	Freeman A. and Doris F.
22 Christina Carney	John J. and Christina D.
22 Joan Kirk	Thomas J. and Mary L.
23 Karl Frederic Barrett, Jr.	Karl F. and Gladys M.
24 Saree Jigarjian	Paul and Akali T.
27 Arthur Theodore Sutherland	Arthur T. and Anna M.
28 Russell Clarence Brown	Clarence D. and Agnes R.
Nov.	
1 Shirley ——— Batchelder	Oscar W. and Dorothy J.
2	
2	
5 John Winship Lyons	Louis M. and Margaret T.
8 Eleanor Jane McKenney	John J. and L. Adelaide H.
9 Alberta Susan LeFave	Albine A. and Marie L.
10 Shirley Evelyn Nelson	Nicholas and Lilly T.
13 Louise Christine Peterson	Evart E. and Persis A.
19 George Ellis Walker	George E. and Frances B.
24 Eugenia Cannuli 26 Bernard Francis Mathews	Frank and Mary D.
	Ernest C. and Irene C.
27 Mary Louise Beaudoin 30 Francis Joseph Rose	Arthur J. and Anna L.  John C. and Elizabeth E.
30 Howard	Charles P. and Katherine G.
110 Wald	Charles 1. and Katherine G.
Dec.	
2 Lloyd Benton Dame	Lloyd B. and Hazel M.
4 Doris Louise Buck	Walter H. and Julia P.
4 Lorraine Turner	Theodore and Alice C.
9 David Lawrence Southwick	Lawrence F. and Frances S.
12 Francis Leo Johnson	Francis L. and Lida W.
28 Florence Mary Sullivan	Joseph and Alice D.
31 Leo Albert Aubrey	Leo A. and Sally H.

## BIRTHS REGISTERED IN TOWN OF READING FOR PREVIOUS YEARS

1885 Jan.

31 Mary Jane Doucette

Jeremiah and Julia M.

1908 July

14 Edith Cummings Mellen Charles E. and Charlotte C.

1911 Feb.

7 Sarah Lucille Long

William G. and Lottie H.

1913 Apr.

19 Richard Daggett Muzzy Horace T. and Emma D.

1914 June

23 Alfred Chandler Perry

Urville and Ethel C.

July

21 Elizabeth Tyler Scott

Edward J. and Edith C.

1924 Sept.

7 Rose Ella Virginia Fisher Harry J. and Eliza F.

1929 Sept.

19 Jane Gallagher

James H. and Josephine S.

Oct.

26 Edward Farrell MacMillan

Edward J. and Katherine H.

Da	te Names	Age	Occupation	Residence
Dec	с.			
22,	1929 John Joseph Sullivan	45	Shipper	North Reading
	Helen Bryant	33	At home	North Reading
Jan	1.			
1	Edward N. Felton	23	Salesman	Reading
	Gladys I. McLean	23	At home	Reading
4	Donald Goodwin Davis	23	Draughtsman	Reading
	Elizabeth Fowler	22	At home	Reading
26	Norman Leslie Cutter	25	Teamster	Reading
	Georgiana Muise	16	At home	Reading
Feb	),			
3	Clifford R. McCarthy	18	Mill Operative	Lawrence
	Gladys E. Johnson	17	At home	Lawrence
9	Thomas James Richardson	28	Chauffeur	Woburn
	Wanda Wendell	29	Mill hand	Reading
15	Harold Amsden Brown	43	Salesman	Reading
	Mary Ruth (Anderson)			
	Holland	38	At home	Wakefield
15	George Parker French	37	Merchant	Melrose
	Mary Hortense Adams	36	Private Secretary	Reading
16	Charles Walter Hunt	19	Mechanic	Wilmington
	Marie Corinne Correia	23	Waitress	Wilmington
Ma	r.			
3	Donald K. Campbell	23	Milkman	Reading
	Ruth E. Frotton	20	Housework	Reading
7	Richard C. Heselton	19	Laborer	Reading
	Dorothy May LaChance	19	At home	Reading
9	Arthur William Anstey	23	Painter	Reading
	Phebe Ann Sturge	22	Housework	Medford
9	Henry Oscar Swain, Jr.	22	Mechanical Engine	
1.0	Ruth Althea Buck	30	Bookkeeper	Reading
10	Daniel Meuse	27	Chauffeur	Reading
22	Louise Edna Nickerson	19	Clerk	Reading
22	Arthur Sinclair Murphy	22 19	Machine Operator Stenographer	Reading
24	Hermina Martha Randing Chester Harold Colburn	22	Clerk	Lexington Somerville
24	Myrtle Smith	25 25	Stenographer	Reading
	Myrtie Silitii	23	Stellographer	Readillig

Dat	e Names	Age	Occupation	Residence
Apr				
8	John Jenson	24	Steward	Reading
	Helen L. Treseler	24	Supervisor	Reading
Apr	i1			
12	Walter Francis Perrin	23	Salesman	Reading
	Frances Eleanor Nash	20	Clerk	Reading
19	Norman Lewis Dickinson	28	Painter	Reading
	Gladys (Rothwell) Kiley	31	Bill Clerk	Wakefield
19	George Frederick Muzzy, J	r. 22	Die maker	Saugus
	Gladys May Rogers	19	At home	Reading
19	Carl W. Roberts	33	Civil Engineer	Reading
	Vera P. Buckle	36	Teacher	Reading
19	Francis Raymond Saunders	23	Blacksmith Stam:	ford, Conn
	Marion Delphine Botts	23	Domestic	Reading
20	Walter J. Joyce	50	Printing Pressman	Reading
	Mary Derrington	44	Nurse	Melrose
20	Wilbur Stanley Sanders, Jr.		Leather sorter	Reading
	Elizabeth Virginia Condon	21	Comptometer Operator	
24	John Dagdigian	60	Florist	Reading
	Lily (Najarian) Kazarian	52	Housework	Cambridge
Ma	y			
3	Ralph Hammond Bickford	24	Paying Teller	Melrose
	Elinore Olive Richardson	26	Clerk •	Meading
3	Seth Shepherd	• 73	Retired	Malder
	Clara J. (Backus) Manley	67	Housewife	Reading
10	John William Wheaton Olivia Alawiska (Perry)	35	Teamster	Reading
	Gibbs	32	Housekeeper	Reading
19	Walter Russell Kean	22	Tanner	Woburi
	Ruth Mildred Winslow	22	At home	Reading
24	John Joseph McKenney	27	Salesman	Reading
	Lena Adelaide Holt	23	Stenographer	Andove
Jun	e .			
1	Herbert Elgin Belcher	27	Florist	Winthrop
	Viola Elizabeth Spinney	26	Student	Reading
3	Charles Wood Easter	20	Carpenter	Newton
	Mary Agnes Ruane	23	Housemaid	Reading
6	George Edward Curtis	23	Clerk	Reading
	Harriet Madelia Dolbeare	24	At home	Wakefield

Da	te Names	Age	Occupation	Residence
Jur	ne			. /
7	Alvin Joseph MacDonald	19	Shoe worker	Wakefield
	Edna Genevieve Smith	16	At home	Reading
14	George Willworth	21	Operative	Malden
	Lillian M. Moore	23	Stenographer	Melrose
21	Marshall Paul Harris	25	Salesman	Reading
	Dorothy Arnold Chamberla	ain 25	At home	Reading
26	David W. Davis	54	Farmer	Reading
	Agnes (Landsch) Hawthor	ne 38	Clerk	Lynn
28	John Henry Measures	27	Bank Clerk	Stoneham
	Katherine Marie Wilson	23	Secretary	Reading
28	Samuel Stanley Thorpe	24	Machine Operator	Reading
	Ruth Eleanor Hazelton	22	Stenographer	Reading
28	Sven Osborn Wiberg	28	Florist	Reading
	Sybil Louise Willis	22	Teacher	Wilmington
Jul	у			
5	Stephen E. Meuse	24	Draughtsman	Medford
	Edith Frances Day	19	Artist	Reading
6	Richard Clement	22	Cook	Fall River
	Gladys Winsby Whittle	25	Cashier	Reading
7	Lawrence G. Coward	24	Clerk	Woburn
	Ruth May Richardson	20	Waitress	Reading
11	Addison Wellington Grant		Furniture Salesman	Reading
	Alice Elizabeth Sargent	-19	Clerk	Reading
16	Elmer H. Richardson	31	Real Estate Broker	Reading
	Genevieve W. Quinlan	27	School Teacher	Reading
18	Joseph Cyril Sullivan	35	Laborer	Cambridge
	Mary Alice Doucette	19	At home	Reading
20	Albert LeBlanc	23	Clerk	Reading
	Margaret A. Muse	23	Teacher	Wakefield
23	Richard Henry Babine	23	Clerk	Reading
	Rita Elizabeth Ward	23	Clerk	Melrose
27	Archibald John Drady	23	Salesman	Somerville
	Dora Annabelle MacCread		Clerk	Somerville
Au				
10		22	Florist	Reading
10	Dorothy Lavinia Boraird	20	Saleslady	Woburn
16	Donald Marston Ainswort		Chemist	Reading
10	Hazel Crocker Killam	23	Clerk	Reading
	Trusci Crocker Killani	20	CICIK	Acading

Dat	te Names	Age	Occupation	Residence
Aug	ζ.			1 1
20	Carl M. Sternberg	24	Mechanic	Woburn
	Flora M. Miller	23	Housework	Reading
23	Clarence Mayers Kimball	27	Bookkeeper	Reading
	Inez Gertrude Farris	26	·Teacher	Oxford, Maine
23	Ellsworth Lord	24	Farmer	Middleton
	Blanche Margeson	19	Mother's Helper	Reading
30	Wilbur Forrest Parkhurst	32		Vestbrook, Maine
	Mildred L. Swain	38	At home	Reading
31	Daniel Patrick Lucey	34	Chauffeur	Melrose
	Hazel Marie Crosby	25	Telephone Opera	tor Reading
Sep	t.			
2	Allen Lawrence Tarr	25	Metallurgist	Lynn
	Gloria Stevens	21	Instructor	Reading
11	Glenn Elmer Whitney	40	Insurance	Reading
	Kathleen Louise Lockwood	30	Secretary	Brookline
12	Gordon Benjamin Burke	21	Truckman	Watertown
	Marion Elizabeth Curry	17	Filer	Boston
14	John Leo D'Entremont	27	Barber	Reading
	Virginia Mary Borque	21	Maid	Medford
14	Bernard Leroy Doucette	23	Florist	Reading
	Iola Elizabeth (Davis)			
	Thaver	26	Reg. Nurse	Reading
14	George A. Stratton	61	Farmer	Boston
	Ida D. (Davenport) Gibbon	47	Laundress	Boston
16	John Joseph McCarthy	20	Milkman	Reading
	Caroline Elizabeth Hatch	18	Housekeeper	Reading
17	Randall Webster Weeks	23	Music	Reading
	Elinor Fales Newton	24	At home	Newton
20	Charles Willard Perkins	24	Florist	Reading
	Edith Elizabeth Comee	19	At home	Wakefield
20	William Pearcy Webb	36	Motion Pictures	Reading
	Helen Doris Turner	35	At home	No. Reading
21	Percy Olin Winslow	31	Auto. Mechanic	Reading
	Catherine Martha Desmond		Stenographer	Reading
23	Albert Hugh Isbell	25	Navy	Camden, S. C.
	Doris Cecelia Smith	17	Shoe worker	Reading
26	Gerard Henry Conners	27	Pressman	Reading
	Mary Frances Furlong	21	At home	Malden
28	Albert Martin Johnson	24	Mechanic	Reading
	Marjorie Ruth Scott	22	Mill hand	Wakefield
Oct	1 / 2			
1	John H. Bates	60	Physician East	Rochester, N. H.
	Bertha E. Rivers	50,	Housekeeper	Reading
4	Ernest Frederick Cummings		Accountant	Boston
	Hannah Wilhamina Tuler	24	At home	Panding

Dat	e Names	Age	Occupation	Residence
Oct				
9	Harold William O'Brien	30	Police Officer	Reading
	Katherine Rita Kilcoyne	30	Bank Clerk	Winchester
11	Charles Edward Melanson	27	Salesman	Reading
	Mary Josephine White	23	At home	Reading
11	Harold W. Putnam	37	Civil Engineer	Reading
	Virginia H. Merrill	21	Bookkeeper .	Reading
13	Thomas Christopher Murray	28	Clerk	Reading
	Mildred Louise Gillis	23	Clerk	Medford
25	Edward Austin Cook	24	Inspector Wells	boro, Penn
	Alberta Hall Damon	24	Social worker	Reading
30	Sidney Harold Lassell	20	Electrician	Reading
	Dorothy Margaret Laetsch	22	At home	Reading
Nov 9		20	Loundman	Danding
9	John Andrew Gallant Frances Genevieve Doucette	17	Laundryman Shoe worker	Reading Reading
15	Robert Naramore Adams	25	Salesman	Reading
13	Frances Cormier	20	At home	Brookline
23		36	-	
23	Joseph Walter Dulong Marion Gloria Enos	35	Moth Dept. Laborer Necktie worker	Reading
26	Edward Albert Wasak	24		Reading
20	Helen Gertrude Keleher	22	Sales Manager Laboratory Technician	Bostor
27	John Nelson Doherty		Painter	-
21	Katherine Helen Kennedy	<b>27</b> 29		Woburt
27	Albert L. Tuttle	67	At home Sheet metal worker	Reading
41	Anna S. (Langdon) Austin	70	At home	Reading
27	Joseph Vincent Dennis	70	At nome	Reading
	Melanson	28	Mason	Malder
	Marie Elsie Pothier	20	Stitcher	Reading
Dec				
16	Leonard McMahon	22	Wood heel worker	Lynr
	Marie Wood	19	None	Lynr
25	Eugene Stephen Dinan	32	Lawyer	Reading
	Mary Emanuel Keleher	26	Office Manager	Reading
25	Manuel Gilboard	25	Merchant	Lawrence
	Sophia Stone	25	Stenographer	Reading
25	Alfred E. Goodwin, Jr.	22	Office Clerk	Reading
	Lillian M. Taber	24	Clerk	Malden
29	Ronald John Michelini	24	Instructor	Reading
	Frances Fowler	21	At home	Reading
29	J. Frederick Richardson	69	Retired	Reading
	Emma J. Boyd	49	Clerk	Boston
31	Raymond M. Butler	24	Jewelry Service	Allston
	Frances Irene Harris	27	Bookkeeper	Reading
31	Henry A. Castine	28	Sailor	Reading

Da	te Name	Y	M	D	Cause of Death
Jan					
4	William J. Sleep	69			Indigestion
5	Mathews Morrison	76			Arterio Sclerosis
6	William H. Black	85	11	12	Heart Disease
6	Mary Eunice Doucette	58			Tuberculosis
13	Florence E. Currier	70	1	21	Carcinoma
16	Annie E. Brown	80	8	10	Arterio Sclerosis
16	Alexander J. LeFave	65	4	9	Heart Disease
16	Isabelle M. Tuttle	68	6	12	Hemorrhage
17	Emma C. Byram	83	11	21	Angina Pectoris
20	Margaret Fitzpatrick	51			0
21	Lydia A. Stiles	86	5	22	Angina Pectoris
25	Robert W. Ferguson	66			Heart Disease
26	Selina E. Kewley	68	4	29	Carcinoma
Feb	· ·				
4	Edwin Greenyer	72	1	18	Hemorrhage
4	Diana M. Hooton	91	6	16	_
5	Charles H. Danforth	92	10	14	
8	Everett E. Flint	68	6	12	,
9	Joseph H. Ward	66.	4	10	
10	Lillian M. Dudevoir	48	7	11	Hemorrhage
10	Charles Howard Enos	0	1	0	Bronchitis
11	Annie J. Richardson	68	2	28	Carcinoma
17	Maud A. Hall	44	7	7	Hemorrhage
17	Isaac Edward Potter	70			Heart Disease
19	Mary C. Brown	67	6	21	Regurgitation
19	Nelson B. Young	30	4	4	Carbon Monoxide
					Poisoning
22	Mary Jane Johnson	71	7	21	Arterio Sclerosis
24	Medora L. Naramore	79	8	16	Hemorrhage
27	John Edmond Belyea	75	4	20	
27	Jessie F. Keefe	66	11	15	Myocarditis
27	Patrick Riley	74	_		Myocarditis
28	George W. Capen	70	5	7	Hemorrhage
Ma					
1					
1	Helen Marie Brown	20	9		Tuberculosis
5	Catherine (Fried) Schmidt	82	14	9	Intestinal Obstruction
5	Josephine Zeymcyak	5	7	20	Heart Disease
8	Melissa A. Mason	80	10	21	Myocarditis

Da	te Name	Y	М	D	Cause of Death
Ma	ar.				
10	Bernard Cohen	66	,		Heart Disease
13	Stephen A. Hayes	77	11	13	Heart Disease
17	James Farpelha	22			Cancer
19	Grace Hall Damon	60	2	24	Arthritis
20	Isabel Durant	82		_	Myocarditis
	David Robert Barnaby	0	0	3	
27	Archibald Ramsay	77	11	24	y
28	Otis H. Brown	61	7	21	
31	Lawrence P. Varnum	86	6	9	Myocarditis
Apı	ī.				
6	D: 1		0	-	A
7	Richard D. Currier	64	8	7	
14	Walter I. Sweetser	55	8	4	Lymphangioma
16	N. III. D. 1	<b>c</b> 0	7	0	C
17	Nellie Buck	69	7	8	Carcinoma
17 19	Francina Scott	66 31	7	11 14	
19 20	Marion G. Rich Hattie R. Litchfield	52	2	4	
20 23		32 48	11	23	Septicaemia
25 26	Eliza J. Jones	40	11	23	Septicaemia
Ma:	у				
3	Clementine Bourque Baker	70		-	Myocarditis
10	Harry E. Fiedler	31	7	_	Accidental Bullet Wound
13	Kirk A. Parker	52	10	24	Angina Pectoris
	Margaret E. Brown	23	7		Tuberculosis
	Etta Hadley	67	1		•
	Mary T. Woods	33	—	_	
	Warren A. Chalmers	11		17	Meningitis
	Bridget Theresa Turner	74	_		Diabetes
23	Samuel McBay	76			Carcinoma
Jun	e				
2	Bertha C. Dole	70	—	—	Cardio Vascular Disease
10	Elizabeth P. Lyman	90	10	15	Gall Stone Colic
14	Andrew Jackson Coates	73	_		Heart Disease
16					
	Charles E. Rice	75			Arterio Sclerosis
18	Melville H. Rowell	65	5	4	The sent - 1141 -
LO	WECTVITTE 11. ICOWEII	05	J	7	Encephalitis

Da	te Name	Y	M	D	Cause of Death
Jun	le				
25					
25	Daniel J. McNeil	33	6	_	Meningitis
25	Charles H. Stinchfield	75	9	15	Nephritis
26	Annie Virginia McGill	87	1	12	Hemorrhage
30	Mary A. Shannon	70	_		Carcinoma
30	Mary Etta Townsend	43	7	21	Toxemia
Jul					
1	Herman L. King	82	9	8	Pneumonia
4	Mary E. Peters	0	0	12	Hemorrhage
4	Caroline P. Pierce	63	11	21	Myocarditis
5	Oliver L. Akerley	71	7	10	Myocarditis
10	Mary N. (Kendall) Cook	88	11	15	Hemorrhage
15	Sarah E. Rider	80	5	27	Arterio Sclerosis
21	Donald Marchetti	2	2	—	Accidental Fall
28	George D. Putnam	60	9	24	Carcinoma
28	Benjamin W. Smith	74	1	7	Pneumonia
29	Delia Hodson	57	7	20	Abscess
29	Catherine A. M. Riley	78	—	—	Hemorrhage
31	John J. Doucette	49		_	Ulcer
Au	g.				
5	Catherine (Moynihan)				
	Doucette	72		—	Myocarditis
9	Robert Mitchel Meuse	0	6	20	Heart Disease
14	Francis Munroe Marsh	24	4	26	Poliomyelitis
14	Laura Wright	67	11	21	Carcinoma
18	Sallie F. Buck	64	3	25	Hemorrhage
19	Alexanderina R. Ramsay	70	4	4	Carcinoma
20	Mary J. Bigelow	67	9	11	Stricture of Oesophagus
24	Simon P. LeBlanc	64	_	—	Carcinoma
25	Florence M. Ball	69	11	11	Carcinoma
28	Albert Mallender	74	1	6	Carcinoma
29	Cornelius Jerome Donovan	80	—	_	Arterio Sclerosis
29	Victoria M. Guscott	69	0	19	Hemorrhage
Ser	ot.				
2	Mary E. Skinner	79	3	6	Hemorrhage
3	Samuel K. Young	36	3	22	Nephritis
7	Nellie J. Lord	65		—	Cancer
8	Mary A. Richards	54	3	10	Arterio Sclerosis
13	Helen W. Chase	72	0	25	Carcinoma
14	Mabel B. Harnden	51	4	1	Carcinoma

Dat	Name	Y	М	D	Cause of Death
Sep	t.				
14	Eliza Jane Nickerson	79	7	20	Lymphoderma
15		0	0	1-1	2 Patent Foramen Ovale
	Elwin J. Roundy	69	_		Heart Disease
25	Maude A. Sprague	70	6	16	Myocarditis
26	Frances M. Fracker	95	5	5	Cardio Vascular Disease
Oct					
3	Emma N. Gerritson	73	10	9	Hemorrhage
16	Albert Skane	19	2	25	Fracture of Skull
17	Charles A. Berry	77	5	25	Heart Disease
18	Frank Linfield	70			Fracture of Skull
21	Simon Clements	89			Hemorrhage
22	Edward M. Russell	43	11	13	Dilatation of Heart
23	Leon Wells Washburn	81	8	15	Myocarditis
28	Albert B. Carr	76	11	10	Enteritis
Nov	7.				
2	Mary E. Harris	76	4	26	Heart Disease
2					
2					
7	Jeanette W. Crafts	78	5	10	Arterio Sclerosis
14	Jane (Vinall) Howe	68	11	9	Hemorrhage
15	Charles Nevers Holmes	58	9	28	Pneumonia
16	Elizabeth Ritchie	73	0	3	Myocarditis
16	Frederick Strahorn	65	3	27	Hernia
21	Benjamin Kittredge	28	8	1	Encephalitis
21	George H. Munnis	50	8	7	Heart Disease
22	Sarah P. Pratt	87	8	6	Carcinoma
29	Martha Isabella Parker	82			Arterio Sclerosis
30	Adaline Virginia Morse	84	11	8	Heart Disease
30	John W. Zuver	74	3	11	Automobile Accident
Dec	•				
10	John Hickman	62	4	5	Apoplexy
4	Agnes Richard	42	4	0	
	Sarah M. Gerritson	78	9	27	Automobile Accident
21	Albert G. Preston	46			Cardio Vascular Disease
	John William Austin	56	0	24	Paresis
	Isabella (Marshall) McLean		2	17	
	Frank H. Bonneau	49	9	27	Angina Pectoris
	Marie H. (Hubbard) Frotton	32	3		Heart Disease
	Arthur Russell Kimball	52	6	16	Pneumonia

#### REPORT OF SELECTMEN

To the Citizens of the Town of Reading:

The Annual Report of the Board of Selectmen for the year ending December 31st, 1930, is herewith submitted:

At the first meeting held on March 7th the Board organized as follows:

CHARLES F. TREVOR—Chairman
W. HOMER MORRISON—Secretary
MOLLIE A. SWEETSER
LEON G. BENT—Clerk

#### Appointments

. Chief of Fire Department—Orville O. Ordway Superintendent of Fire Alarm—Hugh L. Eames Inspector of Buildings—A. Russell Barnes Burial Agent—Alfred E. Goodwin

Custodian of Soldiers' Graves—Walter I. Sweetser\*, Harry A. Turner

Director of Agriculture-Rolland E. Perry

Sealer of Weights and Measures-Carl M. Smith

Board of Appeal—Henry Q. Millett, Chairman, Fred L. Nutter, Charles A. Damon

Fence Viewers—Carl B. Sawyer, Albert E. Temple, Wendell B. Newell

Weighers of Coal and Hay—W. Irving Bancroft, Bertha D. Mac-Lellan, Wendell B. Newell, Charles W. Lee, Thomas E. Brogan, Mabel L. McKay, Percy N. Sweetser, Ruth Climo, William D. Ward, Charles N. Sweetser, Katherine L. Sweetser

Field Drivers—Willard A. Bancroft, Adolph S. Larson, Rolland L. Perry.

Inspector of Wires-Hugh L. Eames

Gas Inspector-David Taggart

Reading Safety Council—Florence H. Libby, Gladys N. S. Fairchild, Alvah W. Clark, Edward G. Quinlan, Jeremiah Cullinane, Adelbert L. Safford, William J. Lumbert

Finance Committee—Robert B. Mount, Forest H. Bryant, James W. Fairchild, Howard P. Knox, Helen R. Grimes

Inspector of Animals-Calvert H. Playdon

Special Police-Leonard Clarkson, J. Fred Richardson, Sylvanus L. Thompson, Edward W. McBrien, Walter Smith, James L. Healy, Henry W. Bryden, William H. Killam, Frank F. Strout, William P. Pierpont, William H. Manning, Charles H. Melendy, Gardner A. Perry, Ralph F. Plouff, George O. Flanders, Kenneth L. Crocker, Francis A. Gallagher, Orrison L. Dickinson, Thomas F. Classon. \*Deceased.

### Licenses Issued

#### Second-Hand Motor Vehicle Licenses

Gray & Webster Motor Sales, Reading Motor Co., Barry Motor Sales, Bailey Chevrolet Co.

#### Lord's Day Licenses

Frank J. Torre, Lewis Q. Smith, Evan E. Keene, Alfred F. Shiner, Frank M. Marsh, Spiro & Costa, James Manuel, Julia M. Caldwell, Edward H. Emerson, Burbank & White (2), Nellië B. Holder, F. W. Lloyd, Gerritson & Melanson, Antonio DeMarco, Samuel Lieberman, Arthur E. Turner, Yesai Minasian, Harold L. Roberts, John F. Havens, Mrs. C. P. Gifford, Arthur D. Towne, James Costules, Edward H. Emerson, Edward F. Brown, Edward F. Duffy, Mrs. A. M. Gale, Charles McLaughlin, Martha M. Gallant, Kenneth C. Young, F. W. White, J. Cuneo & Co., Carrie E. Myrick, Grace D. Johnson#, William Munro and Hugh S. Rodger#. #Transfers.

#### Common Victualer's Licenses

Aram Dagdigian, Lewis Q. Smith, Alfred F. Shiner, Reading Inn, Lewis R. Brown, Albert S. Cann, Frank M. Marsh, Frank J. Richard, Julia M. Caldwell, Edward H. Emerson, Burbank & White (2), F. W. Lloyd, F. E. Bulley, Murphy & Finnegan, John F. Havens, Rose C. Kerr, Frank L. Brown, Gustav Marheineke, Leon Bakanosky, Edward F. Duffy, Charles McLaughlin, Kenneth C. Young, F. W. White, Mrs. Katherine Nelson, Grace D. Johnson, Everett L. Flanders, J. E. Merrick, Emma V. Drewett#, Corrine Landry#.

#### #Transfers.

#### Amusement Licenses

Burbank & White, Albert S. Cann, Lewis R. Brown, Edward F. Duffy, Frank L. Brown.

#### Taxi-Cab Licenses

Gardner A. Perry (2), John Goff (3), Simon Castine (3), Clarence E. Castine (4), William R. Borthwick, Mildred C. Holden.

#### Truck Licenses

George T. Lewis, Harold W. Batchlder, Clarence E. Castine, Angelo Zanni, Joseph L. Peters, L. W. Chase (2), E. A. Crosby, Justin

Moore, William Kelch, Carl N. Sargent, Thos. J. Galvin, John E. Hurd, Clarence L. Smith, Dominick Zanni, Chas. Doucette, Hiram J. Philbrook, George C. Rogers, Lawrence S. Crowe, Ralph E. Roxbee, Cummings Express Co. (6).

#### Bowling and Pool Licenses

Blanche G. Abbott, Chamberlain Bros.

#### Junk Dealers

Jacob Riseman, Max Horovitz

#### Other Licenses

Auctioneers, George E. Horrocks, Frederick L. Springford, Everett W. Brown, Leon F. Quimby, Joseph D. Knight; Third Class Liquor, Danforth's Pharmacy, Inn Holder, E. W. Rogers, Dealer in Old Metal, Rod R. Ricard; Indoor Miniature Golf Course, David L. Riseman, Earle G. Steele; Pop Corn License, Richard Bowman.

Regular weekly meetings have been held during the year and eleven (11) special meetings.

There have been ten (10) public hearings for permits for garages and for the storage and sale of gasoline. The following permits have been issued:

For gasoline storage

C. F. Erickson-Andrew Christensen-Antonio DeMarco

For three car garages
Jeanette Lenfest—Boston Stove Foundry Co.

For increased storage of gasoline Edward H. Emerson

Three permits for gasoline storage have been refused and one still pending.

Pursuant to the vote of the Annual Town Meeting your Board on March 25 signed order of taking for land to be known as the Town Forest. Committee on Re-forestation was appointed and their report follows. We believe this project well worth-while and recommend that the work be continued from year to year.

On June 20th the Eastern Massachusetts Street Railway made application for license to operate busses within the town to replace existing trolley lines. During the consideration of this application conferences were held with Board of Selectmen of the Towns of Andover, Burlington, North Reading, Wakefield and Wilmington, as well as with officials of the Railway. An adjustment in fares within the Town was granted and your Board issued permit to replace the trolleys with busses. The Railway have agreed to remove tracks

on any street if and when any change is made in the surfacing of that street. It is expected that tracks on North Main Street will be removed early in 1931.

On September 5th a public hearing was held on the application of James Mason for license to operate busses within the town without restriction. The Board granted the petition for the Town and in accordance with the law a public hearing was held in the State House, Boston, before the Public Utilities at which this Board was represented. Up to the present time no decision has been reached by that Commission.

The Reading Home for Aged Women donated land at the southwesterly corner of Middlesex Ave. and Linden St. to the Town and same was accepted by the Board. This rounds the corner referred to and makes for better traffic conditions.

At the Annual Town Meeting in March your Board was authorized to exchange land at the northwesterly corner of Main and Lowell Streets with the Old South M. E. Church. The land received will be of benefit to the Town by reducing the sharp turn at this important corner.

In accordance with the vote of the Town at the Annual Meeting a new police station has been built and is now in use by the Department. Every effort has been made to provide the Town with a building well-suited to the needs of this department and we have no hesitancy in saying that this result has been obtained and will work for more efficient operation of our police force. Additional work around the grounds in the spring will considerably add to the appearance of this building.

Your Board is aware of the traffic situation existing on Main Street through the center of the Town. With the re-building of South Main Street last summer and the probable re-construction of North Main Street the coming spring, traffic is bound to further increase. We feel that the proper way to control the situation is by automatic signals and consultation with experts has confirmed our opinion. In view of the probability of the Eastern Massachusetts Street Railway tracks being removed, however, it would seem unwise to take any action until some decision has been reached as to improvements which this work may necessitate in the square.

A careful study is being made of dangerous corners throughout the Town and action will be taken to provide traffic signals thus reducing, in a measure, the hazards at these points.

The business depression existing during the past year has resulted in a situation among some of our citizens which has probably never obtained before. At the request of the Governor of the State we organized as a Committee on Unemployment and through the

press invited all persons in the Town in need of work to register. At our request the Finance Committee transferred \$1,000.00 from the Reserve Fund to be used in handling the situation. While it was impossible to meet all the needs of the one hundred and twenty-five (125) persons who responded, we endeavored to give work to those with dependents so far as the funds would allow. With the men so employed considerable work has been done at the Town Forest and so-called Town Farm as well as dumps cleaned up and unsightly abandoned automobiles removed. It was our thought that the citizens would respond with work at their residences but very few calls have been received. We hope that with the coming spring months the Town will have projects which may further relieve this situation.

The Town Farm property, so called, is now vacant and we recommend that the property be turned over to the Board of Public Works to be used in lieu of their present location on John St.

In closing may we express our appreciation to the various Boards of the Town for their co-operation during the year.

CHARLES F. TREVOR, Chairman W. HOMER MORRISON, Secretary MOLLIE A. SWEETSER

Board of Selectmen

#### REPORT OF THE BOARD OF PUBLIC WELFARE

To the Citizens of Reading:

The Board of Overseers of the Public Welfare submits the following report for the year ending December 31, 1930.

The Board organized for the year by electing Mary F. Daniel as Chairman, Myrtle L. Leman as Secretary, Charles F. Trevor being the third member of the Board. Helen A. Brown was appointed visitor for the Board and Leon G. Bent, Clerk.

Aid, Board and Care  Mothers' Aid  Temporary Aid  Administrative Expenses	4,069.93 3,235.01
,	\$ 22,883.33

Note: The following reimbursements have been or will be received:

#### Aid, Board & Care

Reimbursement	from	other Cities and Towns	\$ 2,355.58
Reimbursement	from	Hospital Fund	662.90

#### Mothers' Aid

*		
Reimbursement from State	e	\$ 1,896.12
	Temporary Aid	
Reimbursement from Stat	e	\$ 3,235.01
		\$ 8,149.61

While Reading has not been as severely affected by the business depression of the past year as have the industrial towns of the state, yet a comparison of the number of persons aided this year with those of 1929 shows a marked increase. We submit this comparison as follows:

Causes for Seeking Aid	1929	1930
Illness	7	11
Unemployment	6	34
Old Age	4	11
Widowhood	8	10
Desertion or non-support	5	7
Mentally deficient	3	3
Total individuals aided	184	269

As may be seen from this table the number of old people aided has increased greatly. Several of these might well come under the head of "unemployment," for younger men, having lost their regular positions, have usurped the "odd jobs" which would be the means of livelihood for our older men.

A new state law, the Old Age Assistance Act, which goes into effect July 1, 1931, will greatly affect this department. It provides aid for needy persons seventy years or over who have been residents of Massachusetts for twenty years. An appropriation of \$5,000 will be requested to meet the requirements of this law. We are now caring for eleven aged persons through the regular channels at an average cost of \$8 a week per person. The requested appropriation is based upon this ratio.

With the aid of a part time visitor only, we are unable to give adequate attention to mothers and families of ill or unemployed persons as well as to the aged and another part-time visitor will be needed from July 1st to December 31st, 1931. The law states that each Board of Public Welfare shall keep this new assistance distinctly separate from all other aid, and the law requires the services of a visitor.

The past year has been most unusual. People have been forced to ask for aid who never before have had public help, and who never

again will be obliged to seek assistance. But there are those who because of large families, inadequate training when young, or physical incapacity will need the help of the Board from time to time. For these people, thoughtful, sympathetic, individual service is needed as well as closer supervision. There is need to make better contacts with relatives and friends, more careful investigation, and to secure work for men, women, and boys and girls of High School age, where their health permits. This the Board hopes to accomplish.

One thousand pounds of confiscated sugar were turned over to the Board by the Chief of Police for distribution among needy families. Two carloads of railroad ties one given by Richard A. Skane and another by the Boston and Maine Railroad, were much appreciated gifts. The Board employed idle men to cut and split the wood.

The Welfare Board wishes to thank the Board of Public Works for its ready co-operation in the distribution of wood, some of which came from the Town Forest. We wish to thank all the friends who so kindly donated clothing, shoes and bedding.

The Board appreciates the willing service of our visitor, Miss Helen A. Brown, who gave unstintingly of her time during the past year. Her knowledge of persons and conditions is invaluable to the Board.

Until this year the Board of Public Welfare has had no permanent headquarters since its separation from the Board of Selectmen. We are now established in Room 17, on the second floor of the Municipal Building, with ample closet space for storing gifts of clothing.

MARY F. DANIEL, Chairman MYRTLE L. LEMAN, Secretary CHARLES F. TREVOR

#### REPORT OF VISITOR

To the Board of Public Welfare:

I herewith submit my report for the year 1930.

The past year has been, as all must realize an unusually difficult one in more than one way. The principal trouble affecting the Department of Public Welfare has been the great amount of unemployment in many lines of industry. To the average man earning only enough to care for the needs of his family from week to week, and, if he has several small children, not able to save much for the future, lack of work for several weeks or months is a great disaster. For this reason alone we have had a number of applications for aid from people who

had never before thought it would be possible for them to be placed in such a position, and be obliged to ask for relief. Twenty-seven families who had never before applied for aid, were obliged to do so this year, while nine who had at some previous time received aid, made new applications, making a total of thirty-tix. The causes for new applications being made were as follows: Three from old age; five from separation or desertion of husband; five from illness; twenty-three from unemployment. Eighteen cases were closed during the year, four by death; two by removal from town; two in which the children had grown up and got work; and ten who had assistance for a short time and regained their independence after a temporary lift.

The visitor recorded 676 visits made to homes, an increase of more than 200 over last year, not including calls made at the State Infirmary, North Reading Sanatorium and other hospitals. More time in proportion to the larger number of people aided has necessarily been given to attention of grocery orders, and milk, coal and other bills have been approved as in previous years.

The assistance of the Visiting Nurse at all times is a great help, and the co-operation of the School Nurse, Attendance Officer and Good Health Committee is also of great assistance. We wish to extend thanks to the members of the Visiting Nurse Association and friends who gave of their time and strength in packing the bountiful Thanksgiving baskets, the contents of which were largely given by the school children.

We are grateful to the various organizations who co-operated in our Christmas work, and thank all for their generosity in giving dinners, fuel, money, clothing and toys. The Police Officers generously gave six tons of coal to some of our families who had been affected by unemployment. More organizations than usual gave dinners, and we would like to express our thanks to the Board of Trade, Knights of Columbus, Elks, Knights Templars, Telephone Girls, schools and churches and many kind friends who gave generously. The Legion Auxiliary gave a great deal of help to the families of Service men who had been obliged to call upon this department for help, when ineligible for Soldier's Relief on account of lack of settlement when coming from another State. We wish to thank all those who helped brighten this Christmas season for these families.

The Visitor wishes to thank the members of the Board for their constant interest and help during the year. Attention to details and a thorough understanding of each case has been a great help, and a large share of responsibility taken, has been much appreciated by her. Mr. Bent, clerk of the Board, is always willing to help in problems which come up, and his assistance is much appreciated,

Respectfully submitted,

## ANNUAL REPORT

OF THE

# SCHOOL COMM!TTEE

OF THE

# TOWN OF READING, MASSACHUSETTS

For the year Ended December, 31

1930

# Memorial to Walter S. Parker

The School Committee of the Town of Reading takes this occasion, the day of the funeral services of Walter S. Parker, to enter upon its records this appreciation of the outstanding service which he rendered to the Town and to its schools.

Although he served our citizens in many capacities in a long and honorable career, his connection with the schools of his native town was particularly noteworthy. As an educator he was employed in the schools of Boston for many years and from his professional training and great store of experience we were permitted to draw heavily during a membership on the School Committee of forty-six years most of that time being it's chairman.

During that extended term every child who passed through our schools enjoyed the benefit of the supervision which he gave to their needs, the interest which he took in their welfare, heard the words of wisdom which came from his lips, and felt the influence of his kindly, human and understanding personality. It is fitting, indeed, that his name shall be borne in lasting commemoration of such service by the Walter S. Parker Junior High School of this town and we rejoice that he should have been spared to share in the activities of that school on many occasions since its completion.

In deep appreciation, therefore, of the memorable services of Walter S. Parker faithfully and well performed, his successors in the School Committee of Reading direct that this expression of our regard and esteem be spread upon the records of the Committee on a page set apart for the purpose and that a copy be transmitted to the bereaved members of his family.

Unanimously adopted by vote of the School Committee. January the seventh, nineteen hundred thirty-one.

#### ADMINISTRATIVE OFFICERS

#### School Committee

Carl M. Spencer, Ch., 119 Woburn St.		Term	Expires	1933
Mrs. Laura S. Gordon, 93 Haven St.		Term	Expires	1933
Mrs. Josephine L. Fowler, 65 Temple St.		Term	Expires	1931
Arthur W. Coolidge, 136 Summer Ave.	٠	Term	Expires	1931
Harold A. Carnes, 39 Grand St.		Term	Expires	1932
Logan R. Dickie, 56 Walnut St.		Term	Expires	1932

#### School Committee Office

High School, Sanborn St. Telephone, Reading 0180 (Open 8.30 a. m. to 4 p. m. except on Saturdays: 9 a. m. to 12 m.)

#### Supervisory Staff

Adelbert L. Safford, \$3,800, Superintendent, Office Hours: School Days, 9 to 9.30 a. m.

Margaret Hunt, \$1,400, Accountant and Order Clerk.

Abigail H. Mingo, \$2,200, Sec. to Supt., Attendance Officer, Dean of Girls, Manager of School Lunches.

Verna L. Wadleigh, \$1,900, Testing and Statistics, Special Research.

Charles R. Henderson, \$1,000, School Physician, Consultant in Athletics. Mabel M. Brown, \$2,000, Director of Health in the Schools and Nurse.

Clara B. Lord, \$1,200, School Nurse and Instructor in Nursing Technique.

Mercie V. Nichols, \$1,900, Supervisor Drawing, teaches in Senior High School.

Margaret Whittier, \$1,800, Supervisor Music, lower grades, teaches in Junior High School.

Margaret Cameron, \$2,000, Supervisor Penmanship, lower grades, teaches in Junior High School.

#### School Clerks

Senior High: Myrtle W. Tilton, \$1,000. Junior High: Doris Skinner, \$968. Junior High: Esther Downs, \$660. Highland: Beatrice Bryden, \$792.

#### No School Signals

Fire Alarm 2-2 repeated 3 times Street Lights turned on for 5 minutes

7.30 a. m. for (Senior High School, Junior High School, Intermediate School [gr. 5 and 6], Opportunity School).

8.15 a. m. for Grades 1 to 4 inclusive, morning session. 12.45 p. m. for Grades 1 to 4 inclusive, afternoon session.

To keep the schools open every school day if possible is the policy of the management. This affords parents the choice either of sending pupils to school or of keeping them at home as the parent considers the conditions warrant in his particular case.

#### School Clinics

Diphtheria Prevention, by special appointment.

Tuberculosis Prevention, by special appointment.

Pre-School, every Tuesday at 3 p. m., at the Grouard House

Dental, Wednesdays and Fridays at the Grouard House

Posture, first Monday of each month at the Grouard House

Habit, first Tuesday of each month at the Grouard House.

#### REPORT OF THE SCHOOL COMMITTEE

To the Citizens of Reading:

The School Committee submits the following report for the year 1930:

Because of the extended report on school accommodations which is also submitted, some of the Department reports usually printed with our Annual Report have been omitted. These include reports of the several supervisors and the principals of the High School, Junior High School and Intermediate School (Highland Building).

We appreciate the loyal efforts of the principals and teachers, the high ideals and continued progress indicated by these reports, and regret that the length of our report this year makes it inadvisable to publish in full. We shall be glad to furnish copies of individual reports to anyone interested, upon request.

The expenditures of the School Department have been kept within the budget for the year, and there remains in the Town Treasury a balance of \$6,741.50, made up as follows: Salary Account, \$1,240.53; General Account, \$5,289.15; Agricultural Salaries, \$103.36; Agricultural Maintenance, \$48.67; and Industrial Tuition, \$59.79.

The greater part of the balance on the General Account is from the \$5,000 budget item for work on the proposed athletic field at the Walter S. Parker Junior High School. This amount was included in our budget for 1930, with the expectation that work on this area would be commenced during the year. But at the Annual Town Meeting a committee was appointed to study the needs of the Town for an athletic field and, as the location referred to was one of those under consideration by the committee, it became advisable not to use the appropriation. It therefore remains in the Town Treasury.

As we understand that the Committee on Athletic Field will not report in favor of this area for a town field, we are securing plans for its development for school purposes. If these plans are prepared in time we shall present the matter to the town through an article in the Warrant of the Annual Meeting.

The Committee has continued the policy of making permanent improvements in the grounds about the schools. During the past year the playground of the Chestnut Hill School was graded and surfaced and fenced off from the highway, and the building was painted. At the Highland School improvements have been made in the walks and drives, the playground has been graded and surfaced, and improvements have also been made about the Channell House, or Opportunity School. There is still some work to be done on the lawns and planting at the Highland School, estimated to cost about \$2,500, which is provided for in our 1931 budget.

It is apparent that the Town must shortly provide increased facilities for the elementary schools. During the year an important survey has been made of the school accommodations of Reading by Professor Jesse B. Davis of the School of Education of Boston University. Your attention is called to his report, which is submitted herewith. The very comprehensive report describes our present facilities and suggests the steps which should be taken from time to time to provide for the growth in school population. We indorse his recommendations in general and believe that the most important task before the School Committee during the next few years will be to secure the sites and to make preparations to carry out the building policy which he recommends. Provision should also be made for neighborhood playground areas, in connection with new schools, a facility in which Reading is sadly deficient.

The above plans call for the abandonment in the course of time of several of the present wooden buildings, including that at Lowell Street. In spite of the prospective abandonment of this school, it will have to be used for a few years longer, and a new heating plant must be installed this summer. A similar condition at the Center School,

while not quite so acute, may require the installation of a new boiler before next year.

In addition to the current or ordinary repairs, there are other items for the repair of buildings and for new class room furniture which should be included in the 1931 budget. While it might be possible to limit the repair expenditures to about the same amount as for each of the last two years, a larger appropriation could profitably and wisely be expended. In the present condition of depression and unemployment it appears to us that a special effort should be made to do as much work this year as can wisely be undertaken, and we therefore propose the appropriation of a larger amount than the absolute minimum requirement. We hope this program may appeal to our citizens as reasonable and that we may be authorized to undertake it.

The space in the High School building which is now used for office purposes by the Superintendent of Schools and the School Committee is needed by the school and should be surrendered by the Committee as soon as possible. Professor Davis' report proposes that the Town acquire the land to the north of the High School building extending between Sanborn and Linden Streets to Lowell Street. His suggestion that in the future extension of the High School a building might be erected which would house a gymnasium, hall and cafeteria is of great interest to us and may solve the problem which we have in Reading of providing a suitable auditorium for Town Meetings and other public purposes. In the town of Norwood a municipal auditorium has been secured in just this way. If in carrying out this plan one of the houses standing on the land referred to could be acquired at this time, it could be easily adapted for the use of the Superintendent of Schools, the School Committee, the school nurse and other departments of school work, such use to continue until the time comes for an extension of the High School building, where suitable office space would be obtained. If we are in a position to report a plan for such accommodation to the Annual Town Meeting, we will submit it through an article in the Warrant.

The athletic activities of the schools have been put upon a permanent and self-sustaining basis, under the supervision and oversight of a sub-committee of our Board. By the purchase of some new equipment and the encouragement of general participation by all in sports and games, marked progress has been made in this field. Health instruction and supervision, the coaching of teams, and the financial operations of the school athletic associations have been established on a sound basis, which gives promise of a steady advance in this valuable function of the schools.

The school buildings and grounds have been brought to their

present satisfactory condition under the supervision of the Sub-Committee on Buildings and Grounds, and the result is a tribute to the painstaking attention which they have given to this work.

The people of the Town were saddened by the recent death of Walter S. Parker, whose services to our schools over a period of forty-six years of membership on this Committee have been notable. A memorial commemorating this outstanding record and the value of his services to the Town has been adopted by the Committee and has become a part of our records.

The terms of Arthur W. Coolidge and Josephine I., Fowler expire and are to be filled at the annual election.

Respectfully submitted,

HAROLD A. CARNES,

ARTHUR W. COOLIDGE,

LOGAN R. DICKIE,

JOSEPHINE L. FOWLER,

LAURA S. GORDON,

CARL M. SPENCER, Chairman.

SCHOOL, COMMITTEE.

# REPORT TO THE TOWN OF READING, MASSACHUSETTS, ON A SCHOOLHOUSE BUILDING PROGRAM

To the School Committee, Reading, Massachusetts, Gentlemen:

I, herewith, submit the following report on a schoolhouse building program for the Town of Reading:

#### Plan of the Study

Every community is faced with the problem of crecting a new school building from time to time. The location, size, and plan of such a building is too often determined only by immediate needs and conveniences. A few years later it becomes evident that the location, size, and plan of the building is not meeting the growing and changing conditions of the town. To avoid such costly mistakes, it is wise to make a thorough study of the future possibilities of the community and its needs, to locate approximately the future sites of the school buildings and playgrounds and to estimate the time when such buildings will be needed.

In order that the Town of Reading may have a forward looking program, studies have been made to estimate the growth of the future population of the town, the increase of enrollment in the several divisions of the schools, and the trends of home building. The present school plants have been inspected, and the entire town has been cov-

ered in studying possible sites for future school locations. As a result of these studies, a definite program of procedure is suggested for a future schoolhouse building program.

#### CHAPTER 1

#### The Present School Plant

The Town of Reading now has six elementary schools, a junior high school, and a senior high school. The elementary schools, with but one exception are small two to four room buildings of the rural type. These buildings are all frame structures and as soon as possible should be replaced by modern fire-proof buildings. A detailed report on each of the present school buildings is presented.

#### The Center School

The Center School was built in 1867 and served as the original high school building. There are five school rooms seating about 48 pupils each. These rooms are mostly over-sized, with windows on two sides. For a building as old as this it has been well cared for and appears to be in fair condition. Its service is merely that of school room seating.

The lot, not much more than 100 feet square, does not provide adequate or suitable playground area for these children. A standard playground for an elementary school should provide about 100 sq. ft. per pupil. This lot does not provide one-third of the required space for the number of pupils enrolled.

The location at the center of business and traffic congestion is increasingly dangerous for the younger children in these grades, two through four.

The building is of wooden construction and is a constant fire and panic risk. These pupils should be housed in a modern, fire-proof building, located away from the business center and with suitable playground area.

It is recommended that this building be used as the administrative headquarters of the School Department. This would give proper space for the offices of the superintendent, secretary, committee meeting room, offices for the supervisors, director of research and guidance, dental and medical clinic, etc. It would also provide needed space for the central storage of school supplies and equipment. This in turn would give some additional space in the Senior High School Building.

#### The Union Street School

The Union Street School is also a wooden building and was erected in 1886. It has a scating capacity of about 150 pupils in four rooms. Its present enrollment is 133 children in the first and second grades.

This building is located near the business and traffic center of

the town. The lot is very small and provides insufficient space for playground purposes. The present yard is filled with sharp stones. A large cement cover of the old cesspool stands out in a way to interfere with play.

While present conditions might be slightly improved, it would be a waste to spend money at this location. This building should be abandoned as soon as a modern building with adequate playground can be provided for this district.

#### The Lowell Street School

The Lowell Street School is housed in a wooden building at least twenty years old. The building appears to be in the poorest condition of any of the schools. The heating plant is completely gone, and considerable repair is necessary to put the building into good condition.

This building consists of four school rooms with a normal seating capacity of about 168 pupils. At present there are 177 pupils in grades one through four assigned to this building.

Again playground facilities have not been given due consideration. There is some vacant area about the building, but it is not graded or laid out for play or health work purposes.

The building has very little to commend it, although the location is quite near to the center of a growing residential district. Definite recommendations for this building will be considered in connection with the future provision for the district as a whole.

#### The Highland School

The Highland School building was opened in January 1897. The exterior is of brick, but the interior construction is of wood. The cost was only \$55,000.00. During the thirty-three years of use it certainly has paid for itself. While the building looks well from the outside, it is a very poorly planned building according to modern standards. Each room is 28 feet by 32 feet in floor area. The corridors are very wide with coat room areas blocked off in a manner to interfere with the passing of the pupils to and from and spoiling the appearance of the building.

There are 10 classrooms seating 48 pupils each in this building, or a total of 480. An auditorium on the second floor seats about 400 pupils. The enrollment this last year was 355 pupils in the grades five and six, with one room for each of the first four grades. The total enrollment was 444. A frame house on the lot is now used as an "opportunity" school.

The lot is of fairly good size for the present building. However, this building with all its faults is too good to abandon. Before any repairs are made to the worn floors or stairways, it would be best to have an architect prepare plans for a remodelling of the building. I believe this could be done to advantage, modernizing the building and increas-

ing its capacity at the same time. If this proves too costly, it is recommended that an addition of six rooms be erected.

While the location is not near the center of the future school population in this section of the town, its retention is undoubtedly the best solution of the problem. This means that a more 'adequate playground should be provided in this neighborhood as near the school as possible.

#### The Chestnut Hill School

The Chestnut Hill School on Hopkins Street is a little two-room building of the rural school type. The building is in very good condition, and the little playground has just been improved. There were 45 pupils in grades one through four enrolled last year. This school will serve the younger pupils in the district until a larger building with modern educational advantages can be provided for this section of the town.

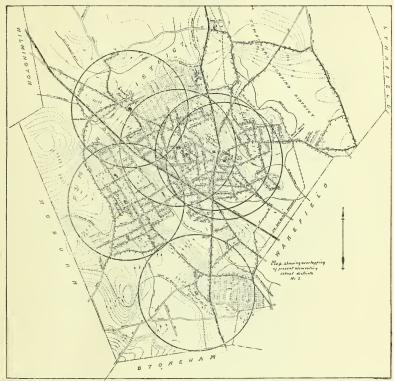
#### The Prospect Street School

The Prospect Street School is one more wooden building erected at least thirty years ago. The older portion is now the second floor, as at one time it was raised, and the lower floor added to increase the capacity. These are two large rooms on each floor seating 48 pupils each. The floor areas in rooms and corridors are very wasteful of space. At the present time there are about 172 pupils from grades one through four assigned to this school. This building is centrally located with respect to the homes of the pupils. This would make a good location for a future building could sufficient land be secured. However, it is always best to sacrifice geographic location for adequacy of site. A proper site for a school in this section should be located at once.

#### The Present Elementary School Districts

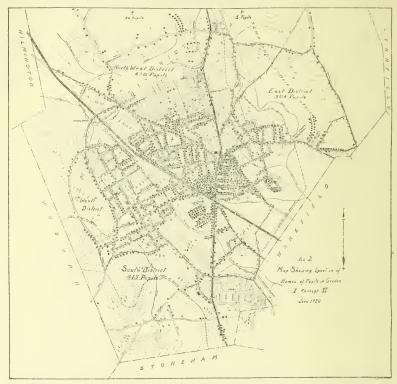
The result of locating school buildings without a forward looking plan is well illustrated by the accompanying map No. 1. A standard elementary school district should approximate a radius of a half-mile circle with the school building as the center. This map shows the half-mile circles for each of the present elementary buildings. From this it will be seen that on the south side, the Prospect Street School and the Chestnut Hill School are very well located. However, the districts of the other schools north of the railroad are very badly overlapping. The future location of school sites should avoid any such needless congestion.

Map No. 1



The Town of Reading is divided into east and west sections by Main Street which runs approximately north and south. Also the railroad running in a general direction southeast and northwest makes a northern and southern section of the Town. With this crossing of Main Street by the railroad we have three districts which naturally suggest appropriate elementary school districts, as it is not desirable to have small children forced to cross a main thoroughfare or a railroad track if it can be avoided. These three districts are designated on the map No. 2, and in this report, as "west," "northwest," and "east" districts. This is due to the fact that it has been the custom to refer to the district southwest of the railroad as the "west" side. The small area south of the railroad and east of Main Street is so small that it will be considered as a part of this "west" district. The "northwest" district may then be described as that section north of the railroad and west of Main Street, commonly known as the "Highland" district. The "east" district is that section east of Main Street and north of the railroad.

#### Map No. 2



The Present Location of the Homes of Elementary School Pupils
A map No. 2 has been prepared with pins indicating approximately the home location of all the pupils enrolled in the elementary grades at the present time.

There is still sufficient area to the north within the town to form three more districts, one east and one west of Main Street and one to the north. However, there are now only 25 pupils living in this entire area, and the building trends are such that we do not need to consider these districts within the scope of the immediate needs of the schools.

#### The West District

The west district, in that section of the town south of the railroad, now has living within its borders 413 pupils enrolled in the first six grades. Fifty of these children live east of South Main Street.

At the present time all children from this district in the fifth

and sixth grades, about 196 of them, go to the Highland School, a long distance from many of these homes. Transportation is provided for those living farthest away. The children in the first four grades attend the Chestnut Hill and the Prospect Street Schools.

If all of the elementary school children in this district were housed in one modern building it would provide a school of 413 pupils. This would warrant a school of sufficient size to afford not only a modern program of studies, but a small auditorium, gymnasium, and a playground which would serve both the school and community as well.

#### The Northwest District

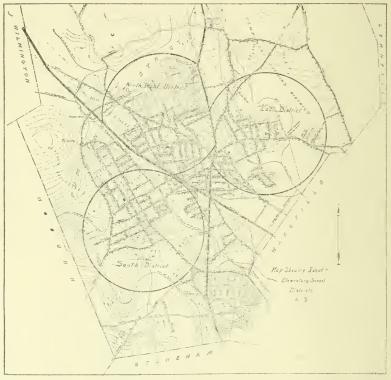
The Northwest District forms a large triangle limited on the north by Forest Street, on the south by the railroad, and on the east by Main Street. This district is served by three elementary schools, the Center School, Lowell Street, and Highland School. There are now 473 elementary pupils living within this general section of the town. Again this number suggests the advisability of providing one modern building of sufficient enrollment to warrant a modern program of studies, health education, and auditorium facilities.

#### The East District

The East District includes all of that part of the town lying north of the railroad and east of Main Street. At present this district is more poorly served with school facilities than any other part of the town. But one little school, the Union Street School, exists within its boundaries. This school houses only the first and second grades, or 133 pupils out of 366 elementary grade pupils living in the district. With a nucleus of this number a centralized elementary school is also strongly recommended for this division of the town.

#### Centralized Schools

The elementary schools of Reading, with the exception of the Highland School, are typical rural schools. This statement applies to the buildings and grounds with their limitation; without a doubt these schools are provided with better teachers, supplies, and supervision than the typical rural school. However, the physical conditions of buildings and grounds interfere seriously with the educational advantages of these children compared with those of the town who are housed in larger and more modern buildings. Three schools, such as have been recommended with one in each of these natural sections of the town, would give to Reading a thoroughly modern elementary school organization. Map No. 3, on next page illustrates the approximate placing of such schools as have been recommended to house the pupils in the first six grades.

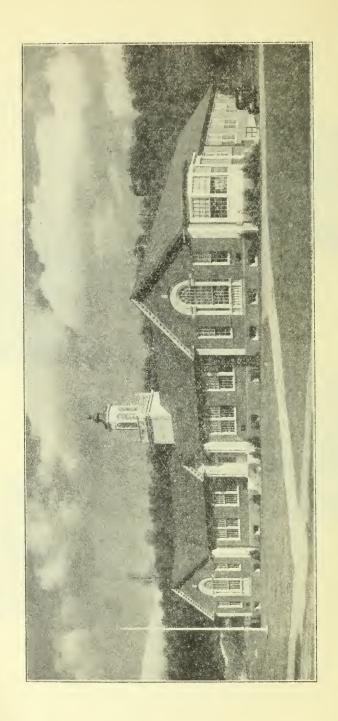


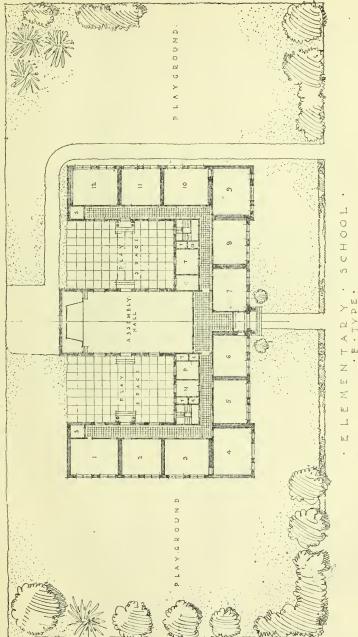
Consolidation is the trend of modern school administration. The transportation of pupils living outside of a proper walking distance has many advantages to offset the objections to the plan. Some of the arguments in favor of consolidation are stated as follows:

- 1. It makes for greater equality of educational opportunity. Pupils from poorer districts have the same advantages as those from the more wealthy sections.
- 2. It provides better school rooms, light, heat, ventilation, and equipment.
- 3. It provides greater motivation of school work by offering wider opportunities in courses such as music, drawing, manual training, domestic science, library, health, and auditorium activities.
- 4. The contact with a larger number of children broadens the child's vision and gives a more enlightened viewpoint.
  - 5. Pupils can be grouped into classes to greater advantage.
- . 6. More efficient supervision is made possible for the superintendent assisted by a competent supervising principal.
- 7. The consolidated school forms a civic and community center for the entire district in which the citizen can be justly interested.









Pictures have been shown of each of the small elementary school buildings of the rural school type. These buildings are all of wooden construction and are on restricted sites without sufficient playground area. To compare these pictures with the one shown in page 109 will give some idea of the possibilities to be found in the recommended consolidated elementary schools. This picture shows a single story in "bungalow" type of school with a ground floor to house the toilets and the practical arts rooms for boys and girls. This ground floor is not shown in the picture, but the sketches of the floor plans will indicate the essential rooms, auditorium, and administrative offices. The drawing also shows a minimum playground area for a school of the size illustrated. Such a building as this is an asset to any community and will enhance the value of the surrounding property.

#### Small Primary Schools

Small primary schools are justified when in any outlying district there are a sufficient number of pupils living within a half-mile radius to form a separate class for each of the primary grades, one, two, and three. It may prove best to provide a few such schools as the growth of the town may demand.

#### The Junior High School Building

The Junior High School building is the only strictly modern school house in the town, and it is one of which the citizens may well be proud. The children of Reading enrolled in the seventh, eighth, and ninth grades have advantages far beyond the rest of the pupils. It is to be hoped that a forward looking program will eventually provide similar opportunities appropriate to all of the grades of the public schools.

Unfortunately, at the time this building was erected, the appropriation did not prove to be quite enough to complete the plans as recommended by the school authorities. A compromise was finally agreed upon, and the building committee cut off from one end of the main structure, the equivalent of six standard rooms, thereby materially reducing the capacity of the building. An addition to this building will be necessary in a very few years.

The immediate need of the Junior High School is the completion of its playground and athletic field. More land than that now owned by the town will be necessary to serve as an adequate field. However, steps should be taken at once to secure such land as may be available and to prepare it for use.

#### The Senior High School Building

The Senior High School was built in 1905. It is of a type that does not well meet the needs of modern high school education. This building has been rated by the scale prepared by Professors Strayer and Engelhardt of Columbia University. The rank arrived at, after

careful inspection, gives only 511 points on a scale of 1,000. In other words, this building is only about one-half of what it ought to be, according to present day standards.

A few of the major lacks of this building may be listed among the following:

- 1. The site is not sufficient for future additions and playgrounds, or athletic field.
  - 2. The building is not of fire-proof construction.
- 3. The heating and ventilating systems are not of the modern type.
- 4. The lighting system and windows are not up to standard requirements.
  - 5. The toilet system is antiquated.
  - 6. Class rooms are all oversized and wasteful in administration.
  - 7. The equipment in the laboratories could be greatly improved.
- 8. There is no opportunity for the proper teaching of home economics, of manual arts for boys, or for music.
- 9. The auditorium on the second floor, prohibiting by law the use of moving pictures for visual education, etc. It is not adapted to school dramatics, is too small for community uses.
  - 10. There is a very inconvenient cafeteria.
- 11. The gymnasium is not worthy of the name, and no suitable locker or bathing facilities exist.

These items are sufficient evidence of the many unsatisfactory features existing in this building. There can be no great relief until a new building, erected as an addition to the present plant together with certain remodelling of the old building, can be provided.

It is, therefore, recommended that steps be taken to secure additional land at this central location, looking forward to the building of a modern senior high school including a gymnasium and auditorium suitable for community uses on the present site. Ample fields for athletic practice and recreation should be located not too far away from the high school building.

## CHAPTER II

# The Growth of the Reading Schools

In order that we may look ahead in planning a school building program, we must first study the past growth of the community and its schools. From these trends we can then prophesy with some degree of accuracy what we may expect by way of school needs in the near future. For this purpose we will study the growth of the population, the enrollment of the elementary schools, the junior high school grades, and the senior high school.

## Growth of Population

The Town of Reading has had a very normal and steady growth since 1895. The following table will give an idea of the growth of population at five year intervals.

			. 1

# Growth of Population

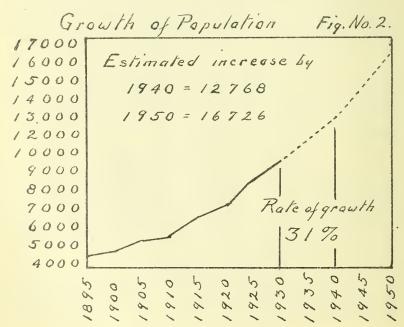
		5 year
Year	Population	Increase
1895	4717	
1900	4969	252
1905	5682	713
1910	<b>5</b> /818	136
1915	6805	987
1920	7439	634
1925	8693	1254
1930	9747	1054
	25 . 5 020	

35 year increase, 5,030.

This table shows how steadily the town of Reading has grown during the past thirty-five years. Within this period the population has more than doubled. The increase for each five year period has varied from 136 to 1,254, yet the progress is increasingly upward.

It is impossible, and perhaps it is presumptuous to attempt to prophesy what the population of Reading will be by 1940 or 1950.

Many unknown factors may enter into the future development of any community. However, for our study it may be safe to assume that the apparently healthy and normal growth of the past ten to twenty-five years may continue. The following figure is an attempt to show this in graphic form,



This graph shows in the heavy line how the population has grown for the last thirty-five years. The dotted line shows the estimated growth on the assumption that the rate of 31 per cent for the past twenty-five years will continue for the next twenty. This estimate, which I believe is a very conservative one, would give us a population of 12,768 by 1940 and of 16,726 by the year 1950. The present population is 9747 and the total school enrollment, as of December 1929, was 2167 pupils. If this same ratio of pupils in school to the total population of the town continues, we should expect, according to this estimated population by 1940, about 2836 pupils and by 1950 at least 3512 pupils. However, this ratio is constantly changing as the schools invariably grow faster than does the population. To illustrate this point: The school enrollment in 1920 was 1586 and the population was 7.437 This ratio applied to the present population would have given us only 1945 pupils while we actually have 2167 as of December 1929. Therefore, we must expect more than the estimated 2836 by 1940 and 3512 by 1950. Let us now see what a study of the growth of enrollment of the schools will indicate.

## Growth of Total School Enrollment

In making a study of the enrollment of pupils in the public schools, it has been found best not to go back to the years included in the period of the late war. Attendance at school, especially in the high school, was so influenced that for the purpose of this investigation data will be used beginning with the school year 1919-20. The following table will show the figures taken from the annual school reports since that date.

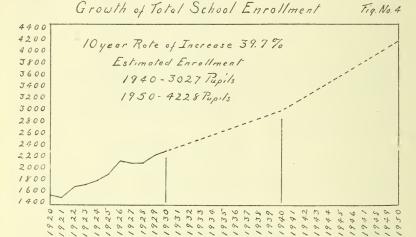
Figure No. 3

	Total	Annual Loss
Year	Enrollment	Or Gain
1920	1586	+66
1921	1548	-38
1922	1701	+153
1923	1749	+39
1924	1806	+66
1925	1927	+121
1926	2082	+155
1927	2025	57
1928	2042	+67
1929	2167	+125

Net	increas	e for	10	years	631	
Perc	entage	of inc	rea	se	39.7	

It will be noticed that there has been an actual loss of enrollment in only two instances during the ten years. Each of the other years shows a positive gain of from 39 to 155 pupils. The net gain for the ten years is 631 pupils or a rate of 39.7 per cent.

For purposes of approximating the number of pupils who may have to be housed within the next ten and twenty years, we will assume that the same rate of growth in enrollment will continue. This estimate can best be shown by the graph printed below as figure 4.



As the rate of increase in school enrollment is greater than the rate of increase in population we find that the estimated number of pupils in 1940 is somewhat larger than the ratio of pupils to population predicted. It has also been found that the rate of increase itself tends to grow with the years. This is easily understood when we stop to consider the constant improvement of the schools. The junior high school movement has kept pupils on the average in school one year longer than before. Prosperity, industrial conditions, and the belief in the value of education are all important factors in the problem.

Therefore, it does not seem unreasonable to assume that by 1940 the town of Reading will have to provide for the housing of about 3027 pupils and by 1950 for approximately 4228 pupils.

## Growth of the Elementary Grades

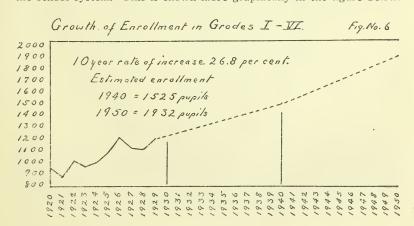
A convenient division of the public school system is to group the grades as follows:

Primary Grades I—II—III Elementary Grades IV—V—VI Junior High School VII—VIII—IX Senior High School X—XI—XII However, for this part of the study, grades I-VI will be grouped as the "Elementary" school grades. The following figures will show the peculiarities in the growth of these grades during the past ten years.

Figure No. 5

	_	
Year	Enrollment	Annual Variation
1920	95:0	
1921	894	<b>—</b> 56
1922	1024	+130
1923	979	<del>-4</del> 5
1924	1002	+23
1925	1098	+96
1926	1228	+130
1927	1143	85
1928	1137	-6
1929	1204	+67
Net ga	in in 10 years	256
Percent	age of increase	25.8

During four of the ten years there has been a loss in enrollment from the previous year. This has resulted in a net gain of only 256 pupils during that period. Just why this is true of these elementary grades and not of the others would be difficult to explain. Undoubtedly the reduction of retardation by guidance and the formation of "opportunity" classes has been an important factor. The rate of increase is lower than that of the population as well as that of the upper grades in the school system. This is shown more graphically in the figure below.



The heavy irregular line shows very clearly the variations in enrollment from year to year. However, there has been an upward trend of 26.8 per cent during the period. Again, on the assumption that it is probable that this rate may continue, we can make an approximate estimate that there will be by 1940 in these first six grades about 1525 pupils, and by 1950 in the neighborhood of 1932 pupils. This would mean that within ten years housing facilities for 321 more pupils must be provided. This would be the equivalent of a ten room building. Also, within the second ten years another demand for ten more rooms will be evident. This situation will be fully considered in the later studies to be presented.

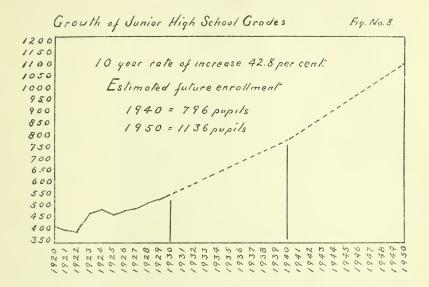
# The Growth of the Junior High School

The following table will show the growth of grades VII, VIII and IX for the past ten years with the gains and losses for each year.

Figure No. 7

Year	Enrollment	Loss or Gain
1920	418	
1921	408	—10
1922	399	9
1923	475	+76
1924	492	+17
1925	472	20
1926	488	+16
1927	499	+11
1928	523	+24
1929	558	+35
Net increa	ase for 10 years	179
Per cent	of increase	42.8

From these figures it will be noticed that distinct losses were met for three years, but that a single jump in 1923 more than made up these numbers. From 1926, and with the opening of the new building in 1927, there has been an increasing gain. The total net gain in the ten years was 179 pupils or 42.8 per cent increase. A graphic representation of this growth, with estimates of future enrollments, is given below.



Again upon the assumption that no unusual or disturbing factors will enter into the situation, and that the growth of the past ten years will continue at about the same rate, lines have been drawn in the graph (No. 8) indicating that the estimated enrollment in the Junior High School by 1940 will be approximately 796 pupils. It will be recalled that in the report to the School Committee, which I made for the original planning of this building, a schedule of rooms for 800 pupils was recommended.

To carry this process of estimation on to 1950 shows an expected enrollment at that time of about 1136 pupils. This situation will force upon the town the necessity of maintaining a large Junior High School by building additions to the present building.

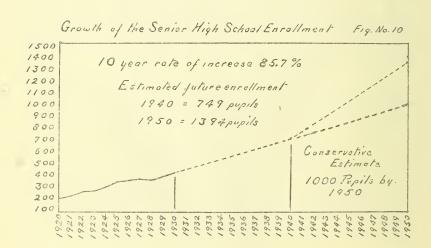
## Growth of the Senior High School

The growth of the Senior High School has been more regular and consistently upward than any part of the school system. This may be due to the general demand for a high school education by all who have the ability and the opportunity to avail themselves of the training. The figures given below will show the record of the past ten years.

Figure No. 9

Year	Enrollment	Loss or Gain
		Loss of Gain
1920	218	
1921	246	+28
1922	278	+32
1923	291	+13
1924	312	+21
1925	357	+45
1926	366	+9
1927	383	+17
1928	382	—1
1929	405	+23
3.7	10	107
	t gain in 10 years	187
Per	cent of increase	85.8

This increase in the Senior High School of over 85 per cent, is characteristic of the growth throughout the country. This increase has been phenomenal since 1890, and we have only recently seemed to have reached the peak of this demand. The graph given below will illustrate this growth and at the same time indicate what may be expected in the future if this rate of increase should continue.



While we have no positive evidence that the enrollment in the Senior High School will not continue at the same high rate, I am of the belief that this can be discounted slightly in the future development as indicated by a second dotted line reaching an estimate of about 1000 pupils by 1950. The program of studies at the Reading Senior High School could well be improved and expanded if building conditions would permit. There is practically no opportunity for growth in the present structure. With a modern building, including a good gymnasium, auditorium, shops and practical arts laboratories, the enrollment would certainly increase. It is evident that within a very few years steps must be taken to provide a modern building to accommodate from 700 to 1000 pupils on a site that will allow of expansion to ultimately provide for the maximum Senior High School enrollment which may be expected in Reading.

# CHAPTER III

# Statement of Building Needs The Elementary Schools

I. The East District: This district, north of the railroad and east of Main Street, is in greatest need of proper housing for its school children at the present time. As has been previously stated, the only school house now in this district is the Union Street School housing 133 pupils in Grades I and II. There are 366 pupils in grades I through VI living in this area. This means that 253 of these children now have to attend school across Main Street and at some distance from their homes.

It has been recommended that both the Union Street School and the Center School be abandoned. There are five rooms in the Center School and four rooms in the Union Street School. There are 113 pupils in grades V and VI who now attend the Highland School from this district. If all pupils now living in this district from grades I through VI were brought together it would make an elementary school of 366 pupils. It would also relieve the Highland School of 113 pupils so that the 98 pupils attending the Center School could be taken care of in their own district.

The immediate need then of this East District is a modern elementary school building to house the 366 pupils of grades I through VI now living in that area with sufficient additional accommodations to house the expected increase for at least ten years. This calls for a building of 14 rooms with such other essentials as a gymnasium, small auditorium, office, etc. A site centrally located for this district should be secured containing not less than two acres to provide the essential playground area for a school of this size.

II. The West District: At the present time there are two elementary school buildings in this section southwest of the railroad. The Prospect Street School, which is quite centrally located, now houses 172 pupils in grades I through IV. The little Chestnut Hill School on Hopkins Street houses only 45 pupils in grades I through IV. There are also about 146 pupils in grades V and VI living in this area attending the Highland School across the railroad tracks, and at a long distance from their homes. If, then, all of these elementary grade pupils were brought together with the 50 pupils who live across Main Street and south of the railroad, it would make a school of 413 pupils.

This situation suggests that the need of the West District will be met when it is found expedient to erect a second elementary school to meet the increasing enrollment. This building, also, should contain 14 rooms to care for the general situation until the enrollment is balanced in all three sections of the town. A site for this building containing at least two acres of land should be secured as soon as possible.

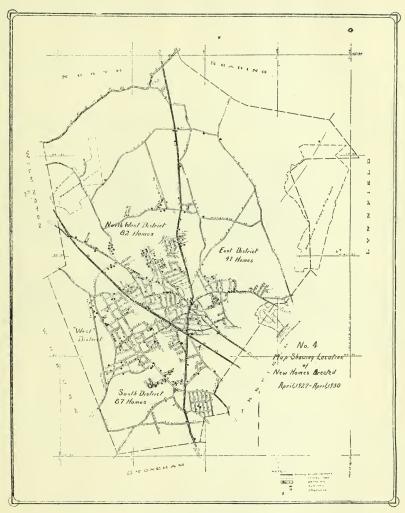
III. The Northwest District: This section of the city north of the railroad and west of Main Street now houses its elementary school pupils at the Center School, the Lowell Street School, and at the Highland School. All together there are 473 pupils in grades I through VI now living in this section. It is recommended that the Center School be abandoned as a school. The Lowell Street School should also be abandoned as soon as possible. To accomplish this, the Highland School should be remodelled or an addition built of about six rooms to fully serve this section of the town.

These suggestions would provide the Town of Reading with the equivalent of three 14 room buildings, or a total of 42 elementary school rooms. This, with the possible remaining two rooms at the Chestnut Hill School, will seat 1540 pupils. The estimated enrollment for these grades for the year 1940 is 1525 pupils. This means that the two elementary school buildings suggested will be needed within the next ten years. Each building should so be planned that it can be increased in size without difficulty or unnecessary expense to care for future demands.

# Future Small Primary Schools

As the elementary school enrollment increases, the erection of small primary schools, to house the first three grades in the outlying centers of population, will serve the needs of the town for many years.

The elementary school districts indicated on the several maps by half-mile circles do not include certain sections just outside the limits of the district. In these outlying sections there will be some of the younger children who should have access to a school nearer their homes. Therefore, just as soon as there are a sufficient number of such children to warrant the formation of grades I, II, and III as a primary school,



a small building should be provided. The possibility of such future needs is indicated on map No. 5.

# The Trend of Location in New Homes

A study of the trends in the building of new homes has been made to serve as an indication of the directions in which the population is growing and its bearing upon the problem of locating school buildings. For this purpose a map has been prepared, (see Map No. 4),

showing the location of all of the new homes built in the Town of Reading from April 1927 to April 1930.

That section south of the railroad, which we have designated as the West School District, contains the largest number of homes erected during the three years, a total of eighty-seven.

That section which we call the Northwest District has also shown considerable building activity with a total of eighty-two homes in the three years.

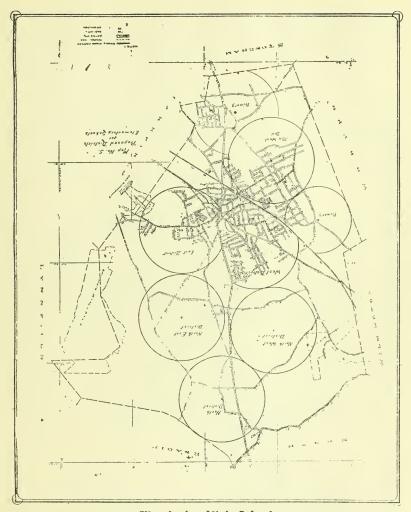
The section east of Main Street, or the East School District, does not show so great a building activity. Only forty-seven homes have been erected during the period studied. However, the zoning law permits multiple residences in this district and the 47 building permits may represent more than 47 families. It should be noted also that only eighteen new homes have been built north of Forest and Wakefield streets.

This map shows that the trend of building is mainly toward the south and the west at the present time. It also indicated ample opportunity for future development toward the north. There is no marked indication that any immediate building activity will materially change the balance of school children living within the proposed school districts.

# Suggested Future Elementary School Districts

Map No. 5 is intended to show the suggested future centers for elementary school districts. These circles have a radius of one-half mile which is the approximate standard for such schools. When it comes to the selection of sites for buildings, these centers should be located as nearly as possible. However, it is always better to sacrifice central location for adequacy of site.

Beyond these suggested districts, there is very little desirable land for building purposes. This is especially true on the east side of the town. As the population grows outside of these circles it may become advisable to establish small primary schools for the younger pupils. These also should so be located that they may be expanded into larger schools as the enrollment increases. This means that any school site selected for future development should contain at least two acres.



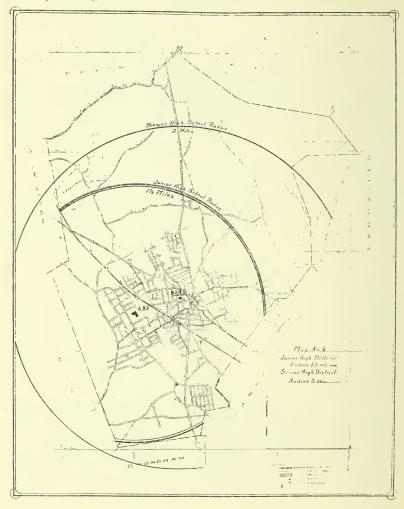
The Junior High School

The needs of the Junior High School are not serious at the present time. The greatest demand now is for the completion of the athletic field and playground area. This should be undertaken at once.

As stated earlier in this report, the Junior High School is growing rapidly and in a very few years will reach its maximum capacity. See Fig. No. 8, Page 113.) In less than ten years it will be necessary to provide additional housing for Junior High School pupils. There are

three possible solutions for this problem. An addition could be built on the present building. A new Junior High School could be started on the north side of the town. The third solution could be worked out temporarily in connection with the problem of the Senior High School.

A study of map No. 6 will aid in the solution of this problem. The Junior High School appears to be very well located with respect to the present distribution of population in the town. The standard radius for a junior high school is one mile and a half. This is indicated on the



map by a double line. It will be noted that this reaches from the southern boundary of the town to a point somewhat north of Forest Street. This district will undoubtedly contain the great mass of Junior High School pupils for many years. It gives us sufficient argument that there will be no need of a second junior high school in the north end.

Also on this map is drawn a heavy circle with a two mile radius taking the present Senior High School as a center. This standard district for a senior high school covers nearly the entire town, and proves that the present building is very centrally located as a permanent site. Therefore, it is recommended that the immediate solution of the future housing of the Junior High School pupils be considered in connection with the needs of the Senior High School.

# The Senior High School

The earlier study of the growth of the Senior High School shows that the enrollment has now reached the capacity of the building and that many of the essentials of a modern high school program of studies are lacking.

Therefore, it is recommended that the present senior high school site be extended to Lowell Street, and that an addition be made to the present building to include the essential rooms to accommodate a total of from 700 to 1000 pupils, and also to include a gymnasium, a cafeteria, and an auditorium of sufficient size to meet the needs of both the school and the community.

Reading is in real need of a community center such as this High School addition would provide. There is no suitable large auditorium centrally located in the town for the holding of town meetings, for dramatics, for high grade concerts and lectures. This proposed auditorium, in combination with a large and well equipped gymnasium and cafeteria, would provide a center for community games, banquets and social functions that would mean much to the town as well as to the school.

This project should be undertaken in time to relieve the rapidly growing enrollments in both the Junior and Senior High Schools. The recommended addition to the Senior High School, large enough to accommodate the expected future enrollment of that school, will be able to house the overflow of the Junior High School until such a time as the growth of both schools makes it expedient to build an addition on the Junior High School building.

# Playgrounds

Every child should have ready access to a playground as well as to a school building. Healthful play out of doors and under right conditions is a fundamental part of our educational programs, and it is the inherent right of childhood.

This is a day of rapid transit. The number of children whose lives are sacrificed annually because they are forced to play upon the streets is appalling. No town can afford to ignore this problem.

## The Present Situation

A beginning has been made toward the provision of play areas in Reading. The land adjoining the Junior High School has been set aside for a playground and athletic field. For the latter purpose more land than that now owned by the town will be necessary. This playground is greatly needed by the Junior High School now, and steps should be taken at once to complete this project.

On the east side of the Town, between Salem and Charles Streets, is a tract of land owned by the town. This area is partially used as a playground and some equipment for the use of the children has been provided. There are possibilities for improvement of this land for community recreation that should be undertaken. The central location of this playground suggests its development as a recreation center for the use of both children and adults.

Another splendid possibility of a large recreation center is found in the area known as "Birch Meadows." While this tract is very peculiar and irregular in form, it has good possibilities for development. This location is sufficiently near to the Senior High School to suggest that a portion of the land be used as an athletic field for this school. Other sections would lend themselves to various activities for general community recreation. The development of Birch Meadows is strongly recommended.

The only place available at the present time for the holding of athletic games is the Base Ball Park on Washington Street. This is now used by the High School for both practice and contests with other schools.

# Future Playground Areas

With the development of the three playground areas just described, the town of Reading will be well provided with general recreation centers. Beyond this provision the only need will be in connection with the proposed elementary school buildings. As elsewhere stated in this report, each elementary school should be located on a site of not less than two acres. The playground spaces should provide about 100 sq. ft. per pupil. Therefore, as new buildings are planned and sites are secured, attention should be given to the adequacy of the playground area.

The problem of the playground and the school should be worked out as a united educational procedure. The supervision of play should be a part of the school system. Opportunities for health and recreational activities should be open to all and within reasonable distances from the homes. Reading has a splendid opportunity to carry on the beginnings made in setting aside well located areas for this purpose. The next step is to improve and to use these playgrounds by providing equipment and supervision.

# CHAPTER IV

# Summary and Recommendations

Until the Junior High School was built in 1926 and 1927, the Town of Reading had done practically nothing by way of building schools for over twenty years. This neglect is now forcing upon the town a cumulation of problems as has been shown in this report. The needs are many and the conditions are constantly becoming more scrious as time goes on. Therefore, it is recommended that a program of expenditures for school buildings and sites be undertaken on a 20 to 25 year basis. This will spread the burden of taxation over the years and will make it possible to carry out a forward-looking procedure to meet the increasing needs of the public schools.

This study of present conditions makes it very difficult to determine just what should be undertaken first. There is real need for new buildings in each of the three elementary school districts. My first reaction to this problem is that these districts should be cared for in the following order: (1) East District, (2) West District, (3) Northwest or Highland District. However, it may prove to be expedient to change the order of the recommendations as other factors, enter into the solution of the problem. The poor condition of the Lowell Street School, the financial policy of the town, and the changing conditions within the schools from year to year must be taken into consideration. To bring these matters definitely before the Committee the following projects are recommended in the order of the apparent needs:

#### Projects

- 1. Sites and Playgrounds: Looking forward to the future needs of the schools for sites and adequate play areas, steps should be taken to improve land already owned by the town and to secure necessary sites while prices are low and land is vacant. The following proposals are recommended:
  - A. Extend and complete the athletic field for the Junior High School
  - B. Extend site of the Senior High School to Lowell Street.
  - C. Secure site for a new elementary school in the East District.

    The Poor Farm location is suggested. The site should consist of not less than two acres.

- D. Secure site for a new elementary school in the Southwest or "West" District of at least two acres.
- E. Secure and improve an athletic field for the Senior High School.
- F. Provide adequate play area for the Highland School.
- 2. Elementary School for East District: Erect an elementary school of fourteen rooms for the East District. This will release the Center School and abandon the Union Street School. It will also make some additional relief for the Senior High School by moving the administrative offices to the Center building.
- 3. Elementary School for West District: Erect an elementary school in the West District of fourteen rooms in place of the Prospect Street School. Then this valuable site can be sold.
- 4. Addition to Senior High School: Build an addition to the Senior High School to include a gymnasium and an auditorium. This will provide for the future growth of the Senior High School. It will provide housing for the overflow of the Junior High School for some years, and until an addition can be built on the present Junior High School. The auditorium should be planned to serve also as a civic center for the whole community.
- 5. Highland and Lowell Street Schools: Either remodel the Highland School or build a small addition of six rooms, and then abandon and sell the Lowell Street School site. This will mean spending some money on the Lowell Street School to keep it in condition for a few years more.

It is estimated that on the basis of present costs an appropriation of from \$35,000 to \$40,000 per year for the period of twenty years will provide ample funds to carry to completion the entire program as recommended.

# Commitment

I wish to take this opportunity to express my appreciation of the willing and ready assistance of the superintendent of schools and his associates. This report is, herewith, submitted for the consideration of the School Committee of the Town of Reading, Massachusetts.

(Signed)

JESSE B. DAVIS, Consultant,

Boston University, School of Education, Boston, Mass.

# REPORT OF THE SUPERINTENDENT OF SCHOOLS, 1930

To the Honorable, the School Committee of Reading, Massachusetts:

I submit herewith my eighteenth annual report and the thirtyeighth annual report of the Superintendent of the Reading Public Schools.

The major problem of school administration for this year has been deciding on a comprehensive plan for determining the nature and location of new school buildings to be erected in the next twenty or thirty years to take care of the growth in school enrolment. All of our schools are comfortably filled with pupils now. Every school room is in use at present. Some more pupils can be cared for in all of the schools but the number that can be added without creating conditions that are detrimental to the best educational results is decidedly limited. With the exception of the buildings of the High School, Junior High School, and Highland School, all the school structures in Reading are typical country school houses built of wood and devoid of many of the important facilities characteristic of a modern urban schoolhouse. About fifteen years ago the Prospect Street School was enlarged by raising the building and constructing two rooms underneath. The Lowell Street School was enlarged by finishing off two rooms in the second story previously unoccupied; and the Chestnut Hill School was enlarged by re-opening a room that had been closed for some time. These five rooms with the Grouard House and the Channell House were the only additions to the Reading school accommodations in twenty years until the erection of the Junior High School building. Unfortunately this schoolhouse had to be cut down about twenty-five per cent after the first preliminary plans were drawn in order to bring the cost within the borrowing capacity of the town inside the debt limit. Consequently the Junior High School is already filled to its normal capacity although it is still possible to take care of a limited number of additional pupils without serious detriment. Because of these conditions it was imperative to plan for the erection of a new building in the near future. The survey made by Professor Davis presents a definite, practical, and satisfactory plan of expansion, involving the enlargement of the Highland School by the addition of six rooms, the erection of two other fourteen-room elementary schools, the enlargement of the Senior High School and of the Junior High School, and the abandonment eventually of the Center, Union Street, and Lowell Street Schools. There is a choice in the order in which these several projects shall be undertaken but it is highly important that some one of them should be started as soon as possible. Otherwise, the normal growth in school enrollment, without abandoning any buildings now in use, will cause serious crowding before the new construction can be ready for occupancy.

During the year 1930 the processes of educating the pupils in the schools has gone forward with undiminished energy in all departments without serious interruptions or fundamental changes in objectives or methods of procedure. A considerable portion of my report for last year was devoted to a survey of educational practices in Reading schools in comparison with the "Significant Movements in City School Systems" as set forth by W. S. Deffenbaugh, Chief of City Schools Division U. S. Bureau of Education in bulletin, 1929, No. 16. Further developments in perfecting and extending these educational practices have been carried on during the past year in all the major divisions of the curriculum: Primary, Intermediate, Junior High, Senior High.

The underlying principle guiding the development on which attention has been specially focused this year has been the clearer definition of the units of learning of the curriculum in the minds of the teachers and the setting up of teaching procedures and tests that will insure that every pupil will master the minimum essentials of each unit of learning and be provided with the opportunity, according to the pupil's ability and disposition, to extend his knowledge beyond the minimum essentials and acquire the mastery of this particular unit to a degree that it becomes a working tool habitually called into use whenever the occasion requires it.

## Primary Schools

In the primary grades attention has been given particularly to reading and arithmetic and to the revision of the time alotments for the different subjects. The teachers in the Primary Grades, under the guidance of Miss Wadleigh, are beginning to study at the present time the methods of teaching through activities of the pupils as well as from textbooks. Teachers' meetings and visitations to neighboring towns and cities are being carried on in connection with this study.

## Intermediate School

In the Intermediate School, grades 5 and 6, attention has been given especially to Arithmetic; new textbooks in this subject were provided, important changes were made in the course of study and appropriate teaching procedures inaugurated. It has taken time to adjust to these changes but any confusion that may have ensued was temporary and by the end of this school year the new procedures will be well established. All agree that the new textbooks are very satisfactory.

Three teachers added to the Intermediate School corps have reduced the size of classes and made it possible to attend more specifically to the needs of individual pupils. To provide rooms for these

additional teachers it was necessary to place one class in the Grouard House, to use for the extra teacher's classes different rooms vacated for a period by classes in practical arts, physical training or music, or by other exercises in the assembly hall.

# Junior High School

The outstanding development in the Junior High School has been the means of improving classroom instruction and attention to the needs of individual pupils undertaken by the teaching corps on their own initiative. Prof. Wilson of Harvard University was engaged and paid by the teachers themselves to give a course in the principles of class management and instruction.

The system of pupil guidance in the Junior High School has been further developed and organized, and a central office and consolidated files for pupils' records established. The guidance teacher for each pupil acts as advisor on matters relating to choice of courses, marks in studies, and behavior problems, and confers with parents at the school, over the telephone, or in their homes as circumstances require.

This school is now giving a variety of objective and standardized tests by members of the teaching staff under the lead of Miss Harriman, who is highly trained in administering standard tests of achievement and of intelligence.

The athletic activities of the ninth grade have been more closely articulated with the Senior High School, affording a better preparation for the opportunities open to pupils on entrance to the senior school.

# Senior High School

The present problems of adjustment and development in the Senior High School center around the increasing number of pupils who desire to attend this school. Many of them are not fitting for college, normal school or other higher institutions of learning. They want and need courses of instruction that will give them a better understanding of the complexities of the present environment in which they are living and will enable them to deal more intelligently and effectively with the life-situations in which they find themselves now or will encounter in the immediate future as they become independent and self-supporting citizens. In order to assist in working out this problem, Mrs. Lucas, who has been Director of Research and Guidance in the Reading Schools for several years, was transferred to the teaching corps of the Senior High School in September. The growth of the Senior High School during the past ten years has been eighty-five per cent while the increase in population of the town has been only thirty-one per cent. This seems to indicate that in Reading as elsewhere, "American Public Opinion desires an institution of secondary grade to minister to all American children, not to a small group of

leaders." (Quoted from Dr. William John Cooper, United States Commissioner of Education.)

Another outstanding development of the Senior High School this year, prompted by the School Committee, has been the reorganization of the administration of athletics. A pupil athletic organization has been formed and an additional coach provided for boys and an assistant coach for girls. Interest among parents and citizens has been aroused; and the present set-up promises well for the future.

# Changes of Teachers

Thirteen teachers left their positions in the Reading Schools during the year: five from the Senior High School, four from the Junior High School, and four from the Primary Schools. Eighteen new appointments have been made (besides several transfers): seven to the Senior High School; three to the Junior High School; three to the Intermediate School; and five to the Primary Schools. One person was transferred from the supervisory staff to a teaching position and one new appointment made in the supervisory staff, making the whole number of supervisory officers the same as in 1929. Among the five positions vacated in the Senior High School and the four vacated in the Junior High School were several of major importance and responsibility, but nearly all of these positions have been filled so satisfactorily that the previous high standards of the schools have been maintained. The high regard in which Reading schools are held by members of the faculty of the Schools of Education of Harvard University, of Boston University, and of other teacher-training institutions has assisted us materially in obtaining applications for teaching positions from students of high standing and of great promise in the field of education, from whom we may make selections for filling vacancies in our teaching corps.

## Administrative Officers

The administrative and executive responsibilities of each school are centered in the principal of the school who is the proper medium of communication with the superintendent and school committee. The superintendent is assisted in supervision by several specialists in particular fields of school administration. They act as his lieutenants in assisting the principals and teachers in organizing and administering the work of the schools in their respective departments and in evaluating and reporting the results obtained to the superintendent for his information and for transmittal to the school committee as occasion requires.

## Accounting Department

All requisitions and orders involving expenditure of money, estimates and proposals for contracts, all accounts of appropriations and expenditures and financial statements involving preparation of

the budget and the disbursement of the same are attended to by Miss Hunt, the accountant in charge of the school committee office. Handling a large amount of detail requiring considerable experience and expert knowledge is required in this position. The work has been somewhat simplified during the past year by discontinuing the dividing of each special column in the general account into the items chargeable to each school. If any particular items need to be distributed among the schools, it can be done by means of the vouchers on file. If more detailed financial research and statistics should be desired, an assistant clerk would be necessary in this department.

## School Lunches

The business management of the three school cafeterias, the midmorning milk lunches, and the supplies for the classes in cooking is delegated to Mrs. Mingo as one of her three fields of work. The management of the cafeterias involves hiring the workers, purchasing the food supplies, fixing the prices of items on the menu, collecting and banking the receipts, adjusting complaints, and seeing to it that each cafeteria is self-supporting but does not charge more for food than necessary. It requires skill, good judgment and vigilance on the part of the manager to accomplish this.

# Attendance Supervisor

Enforcement of the laws requiring school attendance, behavior cases involving suspension from school or court action, special cases involving girls, particularly in the Senior High School, but also serious cases in other schools, are all comprised in Mrs. Mingo's second field of action. Much charity work in distributing clothing, reporting to the Children's Aid Society, the Society for the Prevention of Cruelty to Children, and to representatives of different religious societies is involved in the duties of this office.

# U. S. and State School Returns and Tuition Pupils

As a third field of action, Mrs. Mingo acts as secretary to the superintendent. She takes in shorthand and typewrites his official letters, typewrites the school committee records, compiles the official report to the State and U. S. departments of Education as required by law, keeps an account of all tuition pupils in Reading schools, renders bills for such tuition and checks up with the Town Accountant to see that they are promptly paid. The receipts from tuition amounted to about \$15,000 last year.

## Fitting the School to the Child

For more than ten years Reading has provided a specially trained person or persons to adjust pupils to their school work so that the best results might be obtained for the time and money invested in the pupil's education. This service involves individual tests of ability and

achievement and grouping of pupils, so far as possible, so that the individual will not be held back nor forced ahead faster than insures a reasonable degree of thoroughness. Some adjustments of the requirements of the contents of the curriculum are necessary for pupils that learn slowly as well as for those who learn easily and go ahead rapidly: that is, a definite distinction must be made between the minimum requirements, the standard assignments, and the enriched and extended treatment of each unit of learning necessary to give scope to the abilities of superior pupils. Specific work in these lines has been going on this year as stated elsewhere and improvements have been made in the cumulative record sheet on which placement and promotions are based. Only one supervisor is employed in this work at present instead of the two engaged in it formerly. The principal and guidance teachers in the Junior High School are now able to do this work for their own school to a large extent. Certain parts of the work of adjustment of pupils are taken care of now by the principals and teachers of the other schools, particularly in the schools having a principal who is free from the charge of a room and devotes herself to supervision.

# Health Program

The addition of a second school nurse has strengthened greatly the health work which had expanded beyond the capacity of one individual to attend to it adequately. A new line of work was made possible by the purchase of an audiometer for accurate measurement of the hearing of pupils. The results of these tests are surprising in revealing forty-two cases of a serious degree of deafness in about six hundred pupils tested. In a few cases deafness is so severe that very little if any school progress is possible without teaching the pupil lip-reading. It is evident that a full-time or a part-time teacher of lip-reading is urgently needed in the Reading schools. In the meantime an otologist should examine the pupils discovered with defective hearing and recommend the proper procedure in dealing with each case.

The several clinics: dental, habit, posture, diphtheria-prevention, under-weight, and pre-school have all been carried on successfully as heretofore and in some cases a closer cooperation has been effected with marked improvement in results. In several cases the habit clinic has been able to suggest improvements of the child's school situation and these have been carried out with satisfactory results. The report of the Director of Health on file in the school office contains an extended account of the many ramifications and important achievements of the health work in the schools during the year.

# The No-School Signal

There appears to be a variety of opinions among parents relative to the function or purpose of the signal for closing the schools on stormy days. One idea seems to be that the school authorities should decide for all pupils whether attendance at school is expedient or not. Under any given conditions of the weather, it is always fit and proper under the circumstances for some to attend and for others not to attend. Distance from school, protective clothing, means of transportation, robustness of the child, habits of self-protection, and many other factors must be taken into consideration in deciding the expediency of having any individual child attend school on any particular stormy day. These are questions for the individual parent to decide in the first instance and not for the school authorities. If it appears to the attendance officer that parents are lax and violating the compulsory attendance laws a complaint may be made but such a complaint is seldom if ever entered against a parent on account of keeping a child out of school on a severely stormy day.

The desire of the child to have a record of perfect attendance is commendable but should be subordinated to proper precautions to protect the child's health. Because it may be advisable for some children to be absent does not warrant depriving other children who are differently situated of their right to attend school and receive its benefits. All teachers make provisions for enabling pupils who have been absent to make up in some measure anything missed that may be essential to the pupil's further progress. The average cost of the maintenance of the Reading Schools is more than a thousand dollars per day for the 180 to 185 days per year that the schools are in session. Only in exceptional circumstances can the year be lengthened to make up for days lost on account of stormy weather. As a rule a no-school day is a dead loss educationally. For these and other reasons that need not be enumerated here, it has been a practice for many years in Reading to keep the schools open every day when it seems likely that a majority of the pupils will be in attendance. Several counts of pupils present have been made on stormy days and taking each school as a whole in no case has less than half the total enrollment been in attendance.

In deciding whether or not to ring the no-school signal it is difficult to predict the exact conditions that will prevail an hour later. Although the appearance of clearing weather may be evident, a smart shower may be going on during the critical fifteen minutes or half-hour before the school opens while the pupils are on their way to school. The conditions likely to prevail while the children are going home from school can never be predicted except in a general way in

case of a severe storm. On account of arrangements for transportation and other details of administration it is desirable to decide about two hours in advance if any school is to be closed. It is often very difficult to decide two hours in advance on the necessity for closing. It seems best on the whole to keep the schools open whenever it seems possible and allow parents to decide for themselves whether to send their children or not under the conditions existing at that time.

In closing this report I wish to commend the teaching corps and administrative officers of this department for their whole-hearted devotion to the important trust reposed in them by the School Committee. More and more each year the world is looking to education to preserve and to improve the conditions of living a good life. It is a grave responsibility that rests upon the schools today. It can be carried on successfully only in cooperation with the home and with the encouragement and support of all good citizens.

I thank the School Committee for generous consideration and support in carrying on the duties of my office.

Respectfully submitted,
ADELBERT L. SAFFORD

Superintendent of Schools.

# DETAIL OF EXPENDITURES OF SCHOOL DEPARTMENT FOR YEAR ENDING DECEMBER 31, 1930

Transportation:		
Eastern Mass. St. Ry. Co	\$ 75.00	
James Mason	6,499.40	
Frank H. Powell	24.60	\$ 6.599.00
-	 	
Tuition:		
Middlesex County	\$ 52.00	\$ 52.00
_	 	
Books:		
Allyn & Bacon	\$ 53.59	
F. M. Ambrose Co	38.98	
American Book Co	50.27	
American Educ. Press, Inc.	27.18	
D. Appleton & Co	12.24	
Edward E. Babb & Co	136.01	
F. J. Barnard Co	468.99	

A. S. Barnes & Co	8.34
Beckley Cardy Co	96.58
C. C. Birchard & Co	13.05
The Bobbs Merrill Co	10.04
Bookshop for Boys and Girls	6.37
The Bruce Publishing Co	1.15
Bridgman Publishers	2.12
The Comstock Pub. Co	3.34
Oliver Ditson Co	.80
Division of Publications of Mass	8.25
Dodd, Mead & Co., Inc	7.91
Doubleday Doran & Co	7.86
Employing Bookbinders of America	3.80
Farrar & Rinehart	2.00
The Four Seas Co	.68
Ginn & Co	589.03
The Gregg Publishing Co	140.04
The Gregg Writer	2.00
J. L. Hammett Company	4.81
Harcourt Brace & Co	270.80
Harper & Brothers	4.70
Harvard University Press	2.40
D. C. Heath & Company	294.62
Herrick Company	18.31
Houghton Mifflin Company	130.85
Iroquois Publishing Company	79.08
Keystone View Company	1.97
Charles E. Lauriat Company	4.18
Lea & Febiger	3.50
J. B. Lippincott Company	81.83
Laidlaw Brothers	43.18
Little Brown & Company	17.39
Longmans Green & Company	4.59
Lothrop, Lee & Shepard Company	1.07
Lyons & Carnahan	49.30
Macmillan Co	214.18
Manual Arts Press	4.03
McGraw-Hill Book Co., Inc.	17.31
Mentzer Bush & Co	87.24
Charles E. Merrill Co	166.86
Noble & Noble	5.00
The Old Corner Book Store, Inc	115.15
F. A. Owen Pub. Co	14.05
Oxford Book Co	.59
Douglas A. Porell	18.26

Prentice-Hall, Inc.		
Public School Pub. Co	126.72	
G. P. Putnam's Sons	28.52	
Rand McNally & Co	7.48	
Regents Publishing Co		
Rochfort's Book Shop	4.50	
Row, Peterson & Co	31.13	
Harold Rugg		
Benj. H. Sanborn Co	70.44	
W. B. Saunders Co	2.70	
Charles Scribner's Sons	44.68	
Scott, Foresman & Co	137.79	
Silver, Burdett & Co	161.19	
L. W. Singer Co	4.29	
W. Hazelton Smith	.88	
Standard Book Co., Inc.	13.50	
Teachers College	5.15	
University Publishing Co	11.93	
United Typothetae of America	2.25	
D. VanNostrand Co., Inc.	3.15	
Wheeler Publishing Co	3.17	
"Back Number" Wilkins	5.80	
John C. Winston Co	22.13	
World Book Co.	1,333.62	\$ 5,475.94
	1,000102	Ψ 0,ο
Supplies for Pupils:		
Adams Company	9.98	
American Book Co.	36.00	
American Cookery	1.50	
American Educational Press, Inc.	12.00	
The Art Shop	2.40	
Athletic Trainer's Supply Co	29.87	
G. H. Atkinson Co.	104.56	
Edward E. Babb & Co.	156.72	
Walter H. Baker Co.	.25	
W. Bancroft & Co.	4.80	
Barris Lumber Co.	25.64	
J. C. Birchall Mch. Co.	4.10	
Bostitch Sales Co.	7.25	
Milton Bradley Co.	349.23	
James W. Brine Co.	77.15	
Brodhead Garrett Co.	26.00	
Cambridge Botanical Supply Co	52.60	
John Carter & Co	83.83	
Carter, Rice & Company	73.72	
Carter, refer to Company	10.12	

Central Scientific Company	141.79
M. F. Charles	13.65
The Chemical Rubber Company	135.01
G. S. Cheney Company	24.69
Clapp & Leach, Inc.	11.35
The Classical Weekly	2.00
College Entrance Examination Board	.20
Commonwealth of Massachusetts	13.80
Crescent Laundry	1.00
J. Cuneo & Company	2.65
A. B. Dick Company	6.59
Division of University Extension	15.00
Dennison Mfg. Company	4.84
Denoyer Geppert Company	31.09
Eastman Kodak Stores, Inc.	7.50
Carl Fischer, Inc.	9.86
Furniture Manufacturer	3.00
Garfield Fralick Lumber Company	26.62
Ginn & Company	60.92
Globe Book Company	25.51
Good Will Dairy, Inc.	13.17
The Gregg Publishing Company	6.33
The Gregg Writer	2.00
J. L. Hammett Company	4,121.84
D. C. Heath & Company	54.51
Hodson Brothers	14.15
H. P. Hood & Sons, Inc.	.38
Horace Partridge Company	31.30
Howe & French, Inc	28.99
W. C. Hutchinson	29.25
Jordan Marsh Company	3.20
Journal of Chemical Education	2.00
Kenney Service Station	.75
Laidlaw Brothers	4.32
H. B. McArdle	170.66
The Macmillan Company	2.40
Marine Biological Lab	11.56
The Mathematics Teacher	2.00
Morey & Company	10.00
The Palmer Company	1.24
Popular Science Monthly	3.75
Douglas A. Porell	4.29
Public School Publishing Company	31.04
The Reading Chronicle	30.00
	.50

	Reading High School A. A	44.72	
	Reading Soft Water Laundry, Inc	1.50	
	Anna M. Reck	5.00	
	Rockport Fish Market	2.00	
1	Ryan & Buker, Inc	475.41	
Î	School Arts Magazine	6.00	
1	Scott, Foresman & Company	7.00	
1	Secondary Education Board	5.34	
	Service Bureau for Classical Teachers	1.77	
	Smith-Hammond Company	1.34	
1	Southern Cal. School Book Depository	5.75	
	Samuel Stephens Wickersham Quoin Co	313.89	
į	Teachers College	4.80	
i i	University Publishing Company	12.61	
	Upton Lumber Company	9.60	
	William Westland & Company	11.18	
	W. H. Willis	5.55	
	A. J. Wilkinson & Company	11.23	
	Research Dept. Winnetka Sch. Dept	8.39	
	The John C. Winston Company	3.30	
i	A. M. Wood Company	35.66	
:	World Book Company	294.66	\$ 7,441.00
	_		
Anna	ratue for Teaching		
Арра	Art Extension Press Inc.	\$ 2.00	
Арра	Art Extension Press, Inc	\$ 2.00	
Арра	Art Extension Press, Inc	\$ 22.85	
	Art Extension Press, Inc  Milton Bradley Company  J. G. Blount Company	\$ 22.85 4.08	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co.	\$ 22.85 4.08 126.02	
	Art Extension Press, Inc Milton Bradley Company  J. G. Blount Company  James W. Brine & Co.  Central Scientific Company	\$ 22.85 4.08 126.02 90.21	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company	\$ 22.85 4.08 126.02 90.21 11.00	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son	\$ 22.85 4.08 126.02 90.21	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company	\$ 22.85 4.08 126.02 90.21 11.00 22.06	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc.	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company Francis Brothers	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71 11.43	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company Francis Brothers Garfield Fralick Lumber Co.	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71 11.43 33.66	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company Francis Brothers Garfield Fralick Lumber Co. Gen. Biological Supply House C. S. Hammond & Company The Horace Partridge Company	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71 11.43 33.66 6.64	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company Francis Brothers Garfield Fralick Lumber Co. Gen. Biological Supply House C. S. Hammond & Company	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71 11.43 33.66 6.64 5.00 138.16 77.94	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company Francis Brothers Garfield Fralick Lumber Co. Gen. Biological Supply House C. S. Hammond & Company The Horace Partridge Company Jewell Electrical Instrument Company Jordan Marsh Company	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71 11.43 33.66 6.64 5.00 138.16 77.94 8.00	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company Francis Brothers Garfield Fralick Lumber Co. Gen. Biological Supply House C. S. Hammond & Company The Horace Partridge Company Jewell Electrical Instrument Company Jordan Marsh Company L. E. Knott Apparatus Company	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71 11.43 33.66 6.64 5.00 138.16 77.94 8.00 5.76	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company Francis Brothers Garfield Fralick Lumber Co. Gen. Biological Supply House C. S. Hammond & Company The Horace Partridge Company Jewell Electrical Instrument Company Jordan Marsh Company L. E. Knott Apparatus Company Narragansett Machine Company	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71 11.43 33.66 6.64 5.00 138.16 77.94 8.00 5.76 5.00	
	Art Extension Press, Inc Milton Bradley Company J. G. Blount Company James W. Brine & Co. Central Scientific Company Chicago Apparatus Company E. B. Currell & Son Denoyer-Geppert Company Carl Fischer, Inc. John L. Fowle Company Francis Brothers Garfield Fralick Lumber Co. Gen. Biological Supply House C. S. Hammond & Company The Horace Partridge Company Jewell Electrical Instrument Company Jordan Marsh Company L. E. Knott Apparatus Company	\$ 22.85 4.08 126.02 90.21 11.00 22.06 53.17 19.20 4.71 11.43 33.66 6.64 5.00 138.16 77.94 8.00 5.76	

Wild & Stevens, Inc.	6.45		
A. J. Wilkinson & Company	68,42		
Wright & Ditson	8.50	\$	774.64
Administrative Expense:		•	
	\$ 2.00		
American Gasoline and Oil Company	24.99		
American Medical Assn	1.75		
Athletic Trainers Supply Company	2.36		
G. H. Atkinson Company	.78		
Edward E. Babb & Company	43.88		
F. J. Barnard & Company	.75		
Board of Education	9.00		
Bookshop for Boys and Girls	3.40		
Bostitch Sales Company	18.50		
Milton Bradley Company	1.96		
Joseph Breck & Sons	14.48		
Bruce Publishing Company	3.00		
Henry W. Bryden	18.00		
Bureau of Vocational Guidance	2.00		
Margaret Cameron	25.00		
Carter, Rice & Co.	7.82		
M. F. Charles	.60		
University of Chicago	5.00		
Cummings Express Company	5.50		
Jesse B. Davis	800.00		
Louis Davis	31.20		
Dennison Mfg. Co.	1.24		
A. B. Dick Company	132.96		
Emerson & Company	9.54		
First National Cong. on Mental Hygiene .	5.00		
Francis Brothers	3.40		
Gilchrist Company	18.45		
J. L. Hammett Company	6.40		
C. S. Hammond & Co.	11.20		
Harding Typewriter Company	68.00		
Mary E. Hilton	106.80		
Houghton Mifflin Company	3.34		
Jewell & Andrews	47.00		
Jr. High School Special Account E. S.			
Page, Treasurer	11.58		
Keystone Envelope Company	28.75		
Kingman & Richardson	3.15		
Edward A. Lincoln	11.45		
J. B. Lippincott Company	6.60		
Loyola Educ. Digest	3.00		

Ida C. Lucas	30.00
E. F. Mahady Company	4.61
A. E. Martell Company	39.69
Mass. Teachers Federation	1.05
H. B. McArdle	158.99
A. H. Mingo	1.70
Mittag & Volger	1.00
Municipal Light Board	.85
Nat'l Assn. for the Study of the Platoon	
Organization	1.00
The National Committee for Mental	
Hygiene	3.00
National Safety Council	17.75
The Nations School Publishing Co	2.00
New Eng. Assn. of Col. & Secondary Schs.	2.00
New Eng. Publishing Company	3.00
New England Telephone & Telegraph Co.	823.19
Florence G. Nichols	24.00
Mercie V. Nichols	11.00
The Old Corner Book Store, Inc	5.94
Phillips Ribbon & Carbon Co., Inc	4.85
Douglas A. Porell	4.35
Progressive Educ. Assn	6.00
Public School Publishing Company	65.29
The Public Health Nurse	6.00
The Reading Chronicle	334.65
Reading Custom Laundry	5.90
Reading Motor Company	449.03
Fred Reissle	9.00
Remington Rand Business Service, Inc	104.63
Research Service Company	16.00
Rochfort's Book Shop	1.25
St. Louis Button Company	4.09
School Board Journal	3.00
School Executive Magazine	3.00
School Service Company	5.81
The Science Press	12.03
Scott, Foresman & Company	28.25
H. A. Shepard & Co.	.90
Walter Smith	27.00
William D. Sprague, Mass. H. S. A. A	
Standard Office Machine Company	1.84
S. R. Stembridge	39.09
A. H. Stoelting Company	30.00
Dept. of Superintendence	30.00

	The Survey Teachers College United States Post Office Verna Wadleigh Dorothy C. Walker Ward's Warwick & York, Inc. Margaret E. Whittier	5.00 9.50 190.26 2.00 4.00 2.69 7.60 32.50	,
	W. H. Willis	1.00 135.88 8.30	
	Yawman & Erbe Mfg. Company	29.58	\$ 4,224.51
Fuel:	Wendell Bancroft & Company Oliver A. McGrane Arthur C. Putnam Percy N. Sweetser Charles Wheeler	\$ 3,217.55 80.25 18.00 3,602.08 13.00	\$ 6,930.88
Gas a	and Electricity  Malden & Melrose Gas Light Service  Municipal Light Board	\$ 489.47 1,938.32	\$ 2,427.79
Sewer	r and Water		
	Sewer Dept. Water Dept.	\$ 859.05 653.90	\$ 1,512.95
Ashes	Harold W. Batchelder Boston & Maine R. R. Chase's Auto Express Cummings Express Company P. F. Newhouse Railway Express Company Harry E. Smith Youlden, Smith & Hopkins	\$ 7.50 64.30 2.20 161.52 .75 29.79 285.00 .75	\$ 551.81
Janito	Andrews Paper Company S. G. H. Atkinson Company Boston Mill Remnants Co. Crescent Laundry H. I. Dallman M. C. DiRocco Co.	204.18 50.92 87.50 10.20 104.37 49.98	

	B. C. Dolge Co		73.50	
	Dustbane Mfg. Company		12.74	
	F. S. Eaton		103.63	
	Economy Lubricating Company		43.26	
	Fort Hill Paper Company		179.60	
	Francis Brothers		64.55	
	Alfred E. Goodwin		1.00	
	J. L. Hammett Company		36.10	
	The Norman C. Hayner Company		182.65	
	Hodson Brothers		89.13	
	Howe & French, Inc		3.50	
	W. E. Johnson		1.35	
	Kenney Service Station		6.25	
	Kilsoot Chemical Co., Inc		42.14	
	Lightfoot Schultz Company		20.10	
	Mahoney & Company		4.00	
	Mass. States Prison		82.78	
	Masury Young Company		42.50	
	Midland Chemical Laboratories		105.17	
	Noxon Chemical Products Co., Inc		6.00	
	Ira S. Noyes		34.71	
	Procter & Gamble Dist. Co		25.48	
	Board of Public Works		.50	
	Anna M. Reck		4.30	
	Reformatory for Women		6.37	
	Fred F. Smith		77.17	
	Spencer Company of Boston		. 58.64	
	S. R. Stembridge		11.14	
	Stone & Forsyth Company		70.12	
	Otis P. Symonds & Sons, Inc		1.60	
	The Tropical Paint & Oil Company		7.50	
	Valentine & Co		83.79	\$ 1,988.42
Repa	ir: Buildings, Furniture, Grounds:			
	Albert Pick-Barth Company	\$	13.10	
	Allen Shade Holder Company	•	405.58	
	Art Metal Construction Company		.40	
	Babbitt Steam Specialty Company		2.77	
	W. Bancroft & Company		37.29	
	The Barrett Company		138.00	
	W. C. Barrett		13.15	
	C. O. Bayrd		43.00	
	J. C. Birchall Machine Co.		3.50	
	Board of Public Works, Highway Dept.		2.00	
	Labor		37,83	

Boston Metal Ceiling & Mfg. Co	118.00
Milton Bradley Company	2.23
J. Bredbury	6.50
Clapp & Leach, Inc.	322.84
M. F. Charles	25.80
George Clarkson	8.00
E. B. Currell & Son	432.23
A. B. Dick Company	26.57
Dudley Lock Corporation	200.00
T. C. Fife, Inc.	1,537.63
Francis Brothers	8.35
General Electric Supply Company	15.92
Glynn-Johnson Company	45.21
J. L. Hammett Company	188.72
Harding Typewriter Company	11.76
Stephen Harrow	150.75
Heywood-Wakefield	73.78
Hodson Brothers	671.80
The Hodge Boiler Works	74.75
Jordan Marsh Company	7.20
Kenney Service Station	1.90
Edward Lappin	1.44
H. L. Lefave	18.00
Cory Lindsay Company	116.00
Lyon Metal Products, Inc.	1,147.50
George Marshall	1.50
H. B. McArdle	28.50
Merrimack Valley Roofing Company	50.00
F. E. Merritt	3.00
Morrison-Skinner Company	137.00
Municipal Light Board	254.32
A. H. Packard	26.75
F. S. Payne Company	10.08
Pigeon Hollow Spar Company	30.00
H. Harvey Quigley	67.50
Reformatory for Women	29.63
Remington Rand Bus. Ser., Inc	5.63
Walter Richardson	4.50
Royal Typewriter Company, Inc	5.00
P. J. Seaman	4.74
Sewer Dept	81.47
Fred F. Smith	21.85
H. E. Smith	4,171.22
W. A. Snow Iron Works	166.40
Song and Gift Shop	2.60

S. Stephens, Wickersham Quoin Co	\$ 11,981.91
Agricultural Account	
Books and Supplies:	
American Poultry Journal \$ 1.00	
Francis Brothers	
J. L. Hammett Company	
Hoard's Dairyman	
Horticulture 1.00	
The Macmillan Company 2.71	
Market Growers Journal	
Middlesex County Farm Bureau	
Orange Judd Publishing Company 2.95	
The Reading Chronicle	
John N. Weston	
Hermon T. Wheeler	
John Wiley Sons, Inc	\$ 261.33
Industrial Tuition	
City of Boston \$ 504.84	
City of Somerville	
Wakefield School Dept	\$ 1,040.21

# BUDGET SCHOOL DEPARTMENT, TOWN OF READING, 1930

1931 Estimated Appropriation		Expended 1930	Expended Expended Expended 1930 1929	Expended 1928
	GENERAL ACCOUNT: SALARIES			
	1. Salaries-Teachers and Supt	\$157,759.47	\$157,759.47 \$151,553.81	\$
	2. Janitors	15,813.00	15,952.50	15,952.36
	Attendance Officer	500.00	500.00	500.00
	Medical Inspector	1,000.00	1,000.00	1,000.00
	School Nurse	3,187.00	2,420.00	1,900.00
\$189,500.00	Total Salaries	\$178,259.47	\$171,426.31	\$166,288.41
7,100.00	4. Transportation of Pupils	6,599.00	6,120.62	5,393.50
200.00	5. School Tuition	52.00	169.14	158.57
6,000.00	6. Books	5,475.94	5,025.10	4,854.28
8,500.00	7. Supplies for Pupils	7,441.00	6,364.39	6,191.17
1,500.00	8. Apparatus for Teaching	774.64	2,642.51	2,909.06
3,150.00	9. General Expense:			
	Printing and Advertising & Sch. Com. Exp	62.85	151.75	348.61
	Prof J. B. Davis	800.00		
	Office Supplies	1,044.08	589.61	614.95
	Telephones	823.19	744.23	761.71
	Graduation	228.99	213.26	245.55
	Supt's Expense	34.35	49.91	42.50
	Lectures, Public Meetings	30.00		3.00
	Insurance	54.00	31.57	32.24

# BUDGET SCHOOL DEPARTMENT (Continued)

1931 Estimated Appropriation			Expended 1930	Expended Expended Expended 1928	Expended 1928
		Supervisor's Expense	1,147.05	629.56	380.86
\$ 8,000.00	10.	Fuel	\$ 4,224.51 \$ 6,930.88	\$ 2,409.89	\$ 2,429.42
2,500.00 1,800.00 600 00	•		2,427.79 1,512.95 551.81	2,368.71 1,968.95 596.40	3,258.19 2,265.55
2,100.00		Janitors' Supplies	1,988.42	2,279.28	2,228.40
20,000.00	12.	Maintenance and Improvements  Buildings Furniture  Grounds	\$ 7,219.76 106.60 4,655.55	7,219.76 \$ 10,709.35 \$ 6,716.04 106.60 987.26 711.72 4,655.55 3,670.76 2,326.89	\$ 6,716.04 711.72 2,326.89
61,450.00		TOTAL FOR MAINTENANCE,TOTAL EXPENDITURES—General	\$ 11,981.91 49,960.85 228,220.32	\$ 15,367.37 \$ 9,754.65 53,312.36 47.691.57 224,738.67 213,979.98	\$ 9,754.65 47.691.57 213,979.98

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tax
from
not
Receipts

\$ 16,160.00 \$ 15,490.00 \$ 14,760.00 17,171.51 14,327.48 9,289.75 76.09 91.37 4,719.06	\$ 2,696.64 \$ 2,634.86 \$ 2,379.34 176.68 161.78 197.98 251.33 147.35 56.34		\$ 1,357.52 \$ 1,136.46 \$ 1,122.82 185.70 176.68 161.78 20.17 749.24 646.73 1,003.85 247.08 186.33	1,040.21 582.98 294.75 205.21 160.58 136.66
State Reimbursement, Chap. 70, G. L. Tuition, etc. Sundry Receipts  Due, but not paid (tuition)	AGRICUL,TURAL, ACCOUNT:  1. Teachers', Supt's and Janitors' Salaries  Smith-Hughes' Fund  2. Light, Fuel, Repairs	က်		Tuition paid
	3,000.00	300.00		7,200.00

<del>(/)</del>

# Reading High School CLASS of 1930

SHOW

# Shepardson Hall Friday Evening, June Thirteen at 8 o'clock

# PROGRAM

ALLEGIANCE

Zamecnik

High School Orchestra

PRAYER-Rev. Charles F. Lancaster

Salutatory

OPPORTUNITY

Vincent Heath Whitney

CHORUS-Serenade

Moszkowski

TORCH ORATION

Francis Sumner Merritt

ESSAY-John Winthrop

Gladys Mae Dyer, Faculty Honors

TRUMPET SOLO

Charles Robert Heselton Accompanied by Edith Marion Hilts

ESSAY—The Prospect of World Peace
William Edward Burpee, Class Honors

# PRESENTATION OF CLASS GIFT

Francis Sumner Merritt, Acceptance by Principal

CHORUS-Venetian Summer Night

Moszkowski

# Valedictory

BURNING THE CHAFF

Olive Doris Spear

CONFERRING SPECIAL HONORS

SINGING OF CLASS SONG

Phyllis Dooley, Olive Spear Senior Class

CONFERRING DIPLOMAS

Carl M. Spencer, Chairman of School Board

BENEDICTION-Rev. William T. Murphy, Jr.

EXIT MARCH-The Sky Bird

Wellesley

High School Orchestra

# Candidates for Diplomas, 1930

# Accounting Course

James Duncan Blue Marion Isabelle Walsh Byron Francis Doucette Clarence J. White

# Agricultural Course

George Richard Burns Joseph Francis McKeague
Robert Decker Wheeler

# College Course

Elizabeth Wiswell Allard
Arlene Clayton Browne
Hazel D. Hach
Gertrude Louise McAuley
Olive Doris Spear
Lois Anna Weigmann
Gloria Wilcox

Evelyn Myrtle Benjamin Gladys Mae Dyer Kenneth George Larrabee Philip Goddard Parker Allan Buck Temple Vincent Heath Whitney

# Commercial Course

Eva May Anderson Ruth Whittredge Burditt Rosalie Evelyn Doucette Margaret Elizabeth Greene Dorothy Thelma Perry Edith E. Riemer

Sarah Mary Birnie Lillian Morley Chamberlain Madeline A. Esty Walter Frederick Ingalls Edith May Pratt Mary Scollo

Jennette Elizabeth Woods

# General Course

Bertha Muriel Ainsworth Althea Annie Black Charles Sumner Burditt Elizabeth Burrage Dorothy Chase Elinor Dorothea Conrey Doris Rosa Deferrari Herbert Benjamin Downs Warren L. Fletcher, Jr. Anna Naomi Mary Glaeser Raymond E. Hayward Gertrude Cecelia Hickey Dora Levine Martin Menovich Mary F. Murphy Marguerite Louise Parker Reginald E. Scott Albert Skane Margaret Clare Weafer

Earline Austin

Ruth Folsom

Ralph C. Carter

Elizabeth Jeffrey

Almon Allard John Duncan Brennan William Franklin Burnham, Jr. Bartholomew James Carney Jeanette Alice Cheyne Elena Virginia Conti Timothy William Doucette Grace Elizabeth Ellis Edward Joseph Gascoigne Charles Boardman Harris Charles Robert Heselton Edith Marion Hilts Dorothy Evelyn Melendy Violet Elizabeth Mock George Stevens Parker George Richard Sardell James Sheehan Russell G. Small Jessie Gertrude Westcott

# Normal Course

Marguerite Annie Barber Helen Ethel Colley Joseph A. Cummings Phyllis Dooley Anne Kathleen Driver Charles Truesdell Fife, Jr. Marguerite Frost Mildred Natalie Griswold Esther Herrick Stanley Herbert Low Frances Louise Mathieson Elmer Bradford Merritt Francis Sumner Merritt Leonard Frank Nichols Alice Colby Poole Frank Paul Riley

# Scientific Course

Secretarial Course William Edward Burpee Mary Agnes Connelly Mildred Gertrude Dulong Edith Louise Goodwin Dorothy Mary Wright

TEACHERS IN SERVICE, DECEMBER 31, 1930, WHERE EDUCATED, YEAR APPOINTED ALSO Enrollment for the Four Months Ending December 31, 1930

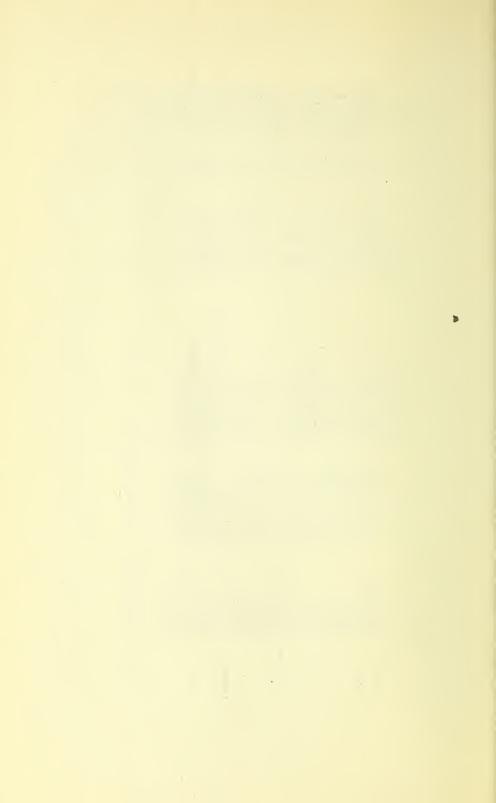
Percent of Attendance	94.80		26.91 94.32 26.61 95.31 30.31 94.81 26.99 94.45
Average Attendance	422.79		
Ауетаде Детьетарір	445.95		28.53 27.67 31.97 28.62
Total Enrollment	154	1	30 30 30
Salary	\$3500 1900 1900 1900 1900 1900 1900 1900 1	1800 1900 1900 1900 2500 2500 3600	2400 1700 2400 1700 1700 1900
Year Appointed	1912 1928 1924 1924 1930 1930 1930 1930 1930 1930	1930 1920 1920 1920 1920 1920 1920	1925 1930 1924 1927 1918 1920 1920
GRADUATE OF	Rudolf Sussmann.  Sconn. Ag., B.S. Ag., B.U., B.S. in Educ. Josephine M. Barlow Edizabeth A. Batchelder Salem Nor., Baston Univ., B.S. Ed. Edrarisas I. Brown. Edward A. Buckley Marie L. Day Marie Dixon Alberta F. Druty Elisabeth Dunning Mt. Holyoke, A.B. Raddilfe A.B. A.M. Ruth Engles  Swellesley, B.A. Frances Greenhald. *Bay Path. Inst., Willimantic Normal Brances Greenhald. *Bay Path. Inst., Willimantic Normal Branch Brances Greenhald. *Bay Path. Inst., Willimantic Normal Branch Bra	*Univ. of Missouri," A.B. Worcester Nor, *Boston Univ., B.S. Boston Univ., Music Super. Course *Colby, B.S.; Harvard, A.M. Educ. **Wellesley, A.B. Harvard, A.M. Educ. **Hamburg Trade School, Germany **Rates, A.B. Harvard, Ed.M. *Springfield, B.P.E.	*Boston University, *Framingham Normal. *Beverly High. *Fitchburg Normal. *Salen Normal Art. *Mass. Normal Art. *Gorham Normal.
NAMES OF TEACHERS	Rudolf Sussmann. Josephine M. Barlow. Elizabeth A. Batcheder Clarissa I. Brown. Elva A. Buckley. Marie L. Day. A. Imrie Dixon. Alberta F. Drury. Elisabeth Dunning. Helen M. England. Ruth Engles. Joseph F. Fitzgerald. E. Frances Greenhalph. Luke Haplin.	Lillian H. Jenkins Ida C. Lucas. Florence G. Nichols. Douglas A. Porell Frederick J. Pore Marian T. Pratt Hermon T. Wheeler Affred Boehm. Raymond W. Balsdell Philip W. Althoff	
GRADES OR SUBJECTS TAUGHT	Principal English Com. Eng. Off. Tr. English Steno. & Type French History Bookkeeping, Pen. Ger. Math., Eng. English Latin Steno. & Type Myorld Hist., Geom. Steno. & Type Mathematics	Biology, Voc. Math. C, Geog., Eng. Hist Physical Edu. Music, Orchestra Chemistry, Physics French. Agriculture Manual Aris. Principal Phys. Ed., Hygene	Mathematics. Foods Science, Guidance. Manual Arts. Art. Woodworking. Social Studies.
SCHOOL	Senior High	W. S. Parker Ju nor High	

TEACHERS IN SERVICE, DECEMBER 31, 1930, WHERE EDUCATED, YEAR APPOINTED ALSO ENROLMENT FOR THE FOUR MONTHS ENDING DECEMBER 31, 1930

Attendance Percent of Attendance	25.97 96.1 26.49 96.0 27.24 95.73 30.25 96.19 28.25 93.15 28.25 93.15 29.14 95.02 28.25 93.15 29.14 97.79 31.68 94.76 31.40 94.76 33.20 96.29 37.87 92.06 37.87 92.06 37.99 96.08
Average	
Average Membership	27, 27, 27, 27, 27, 27, 27, 27, 27, 27,
Total Enrollment	22 28 330 330 331 331 332 332 337 337 337 337 337 337 337 337
Salary	\$1500 1700 1700 1700 1700 1800 1800 1800 18
Year Appointed	1930 1928 1923 1923 1928 1928 1928 1928 1928 1928 1928 1930 1930 1930 1930 1930 1930 1930 1930
GRADUATE OF	*Tufts, A.B. *Salem Normal *Salem Normal *Salem Normal *Bridgewater Normal *Radolife, A.B. *Radolife, A.B. *Radolife, A.B. *Radolife, A.B. *Radolife, A.B. *Salem Normal *Normal *Normal *Normal *Normal *Normal *Normal *Salem Normal *Normal *Normal *Normal *Normal *Salem Normal *Salem Normal *Normal *Normal *Normal
NAMES OF TEACHERS	Grace N. Hefton Gladys Henderson. Inex H. Lewis. Louise B. Maxwell. Emma S. Page Claudia Perry. Ama M. Reck William Rich William Rich Helen M. Thompson Holm M. Woodbridge, Jr. M. Grace Wakefield Dorothy A. Allard Dorothy A. Allard Dorothy A. Allard Winifred Cochrane Mariorie H. Bankle Mariorie H. Bankle Mariorie H. Daniels Halden L. Bankle
GRADES OR SUBJECTS TAUGHT	Latin & English. Science. Sewing. Mathematics. Mathematics. Social Studies. Mathematics. English. Opportunity. Mathematics. French, English. English. Social Studies. Phys. Educ. Social Studies. Prin. Highld. Cen.Un. Grade 5 Grade 5 Grade 6 Grade 1 Grade 1 Grade 2 Grade 4 Grade 4 Grade 4 Grade 4 Grade 6
SCHOOL	Highland Grades 5 and 6

-	The second secon				-				
Opportunity	Lower Classes	Marion F. Richner	*Lowell Normal	1930	1500	17	15.77	14.60	91.45
	Upper Classes	Helen D. Stockwell	*Salem Normal	1930	1400	18	17.19	16.03	93.09
Center	Grade 2	Grace H. Crosby	Salem Normal	1930	1000	27	26.46	25.07	94.69
	Grade 2	:	*Salem Normal	1924	1500	42	40.23	38.03	94.56
	Grade 4	:	*Bridgewater Normal	1930	1100	41	39.44	38.45	92.41
	Grade 4	:	*Salem Normal	1928	1200	42	41.93	39,93	95.21
	Grade 3	:	*Salem Normai	1930	1000	41	39.42	37.17	94.28
	Grade 3	:	*Salem Normal	1928	1200	41	40.75	38.11	93.67
Union Street	Grade 1	Alice D. Berry	*Bridgewater Normal	1927	1500	42	39.37	34.86	88.49
	Grade 1	Addie A. Copeland	*Dover, N. H., High	1925	1500	32	25.82	23.46	90.85
	Grade 2	Glenna A. Dow	*Caribou, Me., High; Hyannis Summer.	1919	1500	37	35.78	33.24	92.77
	Grade 1	Margaret M. Morgan	*Salem Normal	1929	1100	41	39.67	35,55	89.71
Lowell Street.	Prin. and Grade 3	Nellie P. Beaton	*Danvers High	1920	1700	16	16.85	15.49	91.78
	Grade 4	Nellie P. Beaton			_	70	19.69	19.07	71.96
	Grade 2	Dorothy E. Buckle	*Lowell Normal	1930	1500	1:1	13.75	12.85	93.13
	Grade 3	Dorothy E. Buckle				23	22.37	21.47	96.05
	Grade 1	Dorothy E. Burgess	*Lesley Normal	1926	1400	38	36.80	33.59	91,38
	Grade 1	Doris R. Cleary	Salent Normal	1927	1300	12	11.5	10.78	93.89
	Grade 2	Doris R. Cleary				24	23.28	22.13	95.27
Prospect Street	Prin, and Grade 3	Ada E. Dow	*Caribou High Sch., Emerson, 2 yrs	1908	1700	44	43	40.69	95.33
	Grade 2	Jessie Little	Bridgewater Normal	1926	1400	39	37.98	35.29	92.89
	Grade 1	Velma Herrick	Perity Normal	1927	1400	43	41.88	38,10	90,94
	Grade 4	Olive S. Perry	*Wheelock	1916	1500	44	42.52	40.51	95.27
Chestnut Hill.	Prin. and Grade 1	Irene Richardson	*Aroostook State Normal	1928	1600	10	10.77	9.77	90.62
	Prin. and Grade 2	Irene Richardson				14	13.95	13,16	94.31
	Grade 3	Gladys Gibbons	*Salem Normal	1930	1000	6	9.75	9.19	93.4
	Grade 4	Gladys Gibbons				18	17.83	16.73	93.8
Totals						2232	2172.94	2172.94 2052.95 94.5	94.5

\*Have taken additional courses in education and graduate work.



# Ninth Annual Report

OF THE

# BOARD OF PUBLIC WORKS

For the Year Ended December 31

1929

To the Citizens of Reading:

The Board of Public Works organized in March, 1930, with Samuel H. Davis as Chairman and Wm. T. Fairclough as Secretary.

On April 11, 1930, Mr. Davis resigned to accept the appointment as Town Counsel and Mr. Martin B. Hartshorn was elected to the chairmanship of the Board of Public Works.

The policy of eliminating contract work was adopted by the board, as far as possible. This action saved the contractor's profit and also the fees of consulting and designing engineers, and kept the money in the town by hiring local labor and buying material from local merchants.

A new standpipe of 1,000,000 gal, capacity was erected and the investigation for additional water supply carried out very thoroughly.

The detailed report of the work as carried on through the year is appended, and it is the intention of the Board to continue the major improvements as they have been started.

MARTIN B. HARTSHORN, Chairman. WILLIAM T. FAIRCLOUGH, Secretary. HAROLD W. PUTNAM, FRANK M. MERRILL,

Board of Public Works.

# SUPERINTENDENT'S REPORT

To the Board of Public Works:

Gentlemen:

As required by Section 4, Chapter 118, of an Act authorizing the Town of Reading to establish a Board of Public Works, I respectfully submit for your consideration the tenth annual report of the Department of Public Works (Water, Highway, Sewer and Park) including a financial report of each department, and a chronicle of the principal work performed with recommendations for the coming year.

At the beginning of 1930 it was decided, by the Board of Public Works, that the work would not be let out to contractors and we have therefore carried out the program of construction, in all departments, to a very good advantage, with our own forces. In this manner we saved at least the contractor's profit, and considerably more work was done with the appropriation. One of the direct benefits of doing the work ourselves was the fact that the appropriations were spent in

the town and from 50 to 60 extra employees were kept at work during an exceptionally dull season.

The men in charge of the work in the different departments have accepted their numerous additional duties with admirable enthusiasm and have accomplished most satisfactory results in every case.

WILLIAM J. LUMBERT, Superintendent.

# WATER DEPARTMENT

	WATER DEPARTM	MENT		
Main	tenance Account:	-		
Rece	ipts:			
	Cash Balance, 1930 Meter Rates Hydrant Rental Service Pipe Const. Misc. Receipts			\$16,806.97 46,450.65 7,980.00 1,861.55 945.31
	Total			\$74,044.48
Expe	enditures:			
1.	Pay Roll	988.00 397.75		
	Total		\$ 11,385.75	
2.	General Repairs  Electric Power and Light	120.23 396.09 165.23 583.37		
	Total		\$ 13,264.92	
3.		314.00 423.60		
	Total		\$ 3,737.60	

4.	Maintenance of Meters: Pay Roll Supplies and Repairs	\$	1,934.74 1,661.49	
	Total			\$ 3,596.23
5.	Maintenance of Service Pipes: Pay Roll Tools and Supplies			·
6.	Total Maintenance of Main Pipes: Payroll Misc. Supplies	\$	217.36 47.99	\$ 1,812.42
7.	Total		10,000.00	\$ 265.35
8.	Total	_	1	\$ 10,000.00
9.	ceipts			\$ 2,582.50
	Pay Roll		2,128.11 2,151.93	
10.	Total	:		\$ 4,280.04
11.	Repairs and Supplies Shop Maintenance:			\$ 378.17
	Pay Roll Repairs and Supplies	\$	149.56	
12.	Total			\$ 149.56
	Pay Roll	\$	4,471.63 9,591.01	
13.	Total			\$ 14,062-64
	Pay Roll	\$	2,190.41	
	plies	_	2,395.55	
	Total			\$ 4,585.96

14. Meter Construction:  Meters	
Total \$ 1,689.40	
15. Hydrants and Drinking Fountains: Pay Roll\$ 479.74 Repairs, Fittings and Supplies	
Total	\$ 72,754.22
Balance Cash on Hand	\$ 1,290.26
Main Pipe Extension Account:	4
Balance Jan. 1, 1930 Expended 1930:	\$ 1,222.58
Pay Roll	
	1,222.58
Balance	.00
New Standpipe Account:	
Bond Issue	\$ 35,000.00 289.33
	\$ 35,289.33
Expended in 1930:	
Pay Roll \$ 555.97 Contractor, Engr. Supplies,	
Misc 29,357.86  Balance	\$ 29,913.83 \$ 5,375.50
Cost of Plant Dec. 31, 1929	\$504,251.01
Expended 1930:	*
Main Extension, Mainten- ance Account \$ 14,062.64	
Main Extension Construction	
Account 1,222.58 Meters 1,68940	

Standpipe and Connections	29,913.83	
Total		\$ 46,888.45
Total Cost of Plant Dec. 31, 1930		\$551.139.46

# REGISTRATION REPORT

Amount of bills (metered water) rendered in 1930  Amount collected and paid Treasurer  Amount uncollected  Amount abated	\$	46,351.60 210.65 366.42	\$ 46,928.67
	\$	46,928.67	\$ 46,928.67
Amount of bills (metered water) of previous years uncol- lected		,	\$ 164.80
Amount collected and paid Treas-			
urer	\$	99.05	
Amount uncollected		.00	
Amount abated		65.75	
	\$	164.80	\$ 164.80
Amount of Service Pipe Construc-	T		
tion Bills rendered in 1930			\$ 1,943.33
Amount of bills of previous years			207.14
uncollected			287.14
Amount collected and paid Treasurer  Amount uncollected	\$	1,861.55 368.92 .00	
	\$	2,230.47	\$ 2,230.47
Amount of Service Pipe Mainten-	,	,	
ance bills rendered in 1930			\$ 427.49
Amount of bills of previous years			8.94
uncollected			0.74

Amount collected and paid Treas- urer	\$	428.07 8.36 .00		,
Amount of Main Din Maintenana	\$	436.43	\$	436.43
Amount of Main Pipe Maintenance bills rendered in 1930				.00
Amount of bills of previous years uncollected Amount collected and Paid Treas-				.00
urer		.00		
Amount uncollected		.00		
	posteriore	.00	and the same of	.00
Amount of Meter Maintenance bills rendered in 1930 Amount collected and paid Treas-				\$9.18
urer	\$	9.18		
Amount abated	\$	.00 9.18	\$	9.18
in 1930			\$	60.18
Amount collected and paid Treasurer  Amount uncollected	\$ \$ \$	60.18 .00 .00	\$	6.18
	\$	60.18	\$	60.18

# RAINFALL

The average rainfall for Massachusetts as deducted by the State Department of Health from long continued observation in various parts of the State is 44.54 inches.

As may be seen by a table in this report showing the amount of rainfall for the years 1900 to 1930 inclusive, the average rainfall at the Reading Pumping Station is 40.92 inches. The rainfall this past year was a deficiency of 11.29 inches compared with the State observation and a deficiency of 7.67 inches from our Pumping Station observations. There was an excess of rainfall in the months of May, July, October and November of 3.00 inches, and a deficiency in the other months of

10.67 inches, compared each month with an average rainfall between the years 1900-1930 inclusively.

The elevation of the Reading Pumping Station is approximately 80 feet above sea level.

The greatest rainfall in any one day was on Thursday, August 7, 1.20 inches.

# RAINFALL AT PUMPING STATION, 1930

	Normal Rainfall (Inches	Rainfall in 1930 (inches	Excess or Deficiency in 1930 (Inches
January	3.31	2.48	0.83
February	3.44	2.05	-1.39
March	3.54	3.29	0.25
April	4.02	1.90	-2.12
May	3.01	3.38	+0.37
June	3.67	2.19	-1.48
July	3.51	4.07	+0.56
August	3.34	2.77	0.57
September	3.49	0.79	<b>—2.70</b>
October	2.81	4.45	+1.64
November	3.25	3.68	<b>—</b> 0.43
December	3.53	2.20	-1.33
	40.92	33.25	<del></del> 7.67

# YEARLY RECORD OF PUMPING STATION FROM JANUARY 1, 1930, TO JANUARY 1, 1931

Month	No. Days	Hrs.	Min.	Gallons Pumped	Total Head	Pounds Coal	Gals. to Lbs. Coal	Rainfal
January	31	385	15	10,810,263	218	61,702	175	2.48
February	28	348	45	9,708,822	218	55,094	176	2.05
March	31	399	30	11,382,462	218	74,121	154	3.29
April	30	407	30	12,161,430	218	61,784	197	1.90
May	31	465	30	13,813,758	218	66,114	209	3.38
June	30	486		14,522,688	218	67,530	215	2.19
July	31	483	30	13,627,188	218	63,973	213	4.07
August	31	514	30	14,070,816	218	67,854	207	2.77
September	30	584		14,883,474	218	69,247	215	0.79
October	31	451	15	10,072,694	218	53,259	189	4.45
November	30	398	15	10,939,428	218	58,039	188	3.68
December	31	368	45	11,193,950	218	61,501	183	2.20
TOTALS	365	5292	45	147,186,973	218	760,218	193	33.25

Average Pumpage per day, 403,257 gallons

TABLE SHOWING THE AMOUNT OF RAIN AND MELTED SNOW FOR YEAR ENDING DECEMBER 31, 1930

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
1 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 220 23 24 225 26 27 28 29 30 31 TOTALS			.13 	.12	.02 .34 	T 3.03	.02 .03 		.36 			
TOTAL TO DATE	2.48	4.53	7.82	9.72	13.10	15.29	19.36	22.13	22.92	27.37	31.05	33.25

# AMOUNT OF RAINFALL FOR YEARS 1900 TO 1930

Year	January	February	March	April	Мау	June	July	August	September	October	November	December	Total
1900 1901 1902 1903 1904 1905 1906 1907 1908 1910 1911 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 Avg	5 .32 1 .33 1 .80 4 .42 5 .44 4 .54 4 .54 2 .60 3 .97 4 .17 4 .54 2 .25 2 .68 3 .34 4 .54 2 .25 2 .48 3 .34 4 .54 2 .25 1 .22 2 .25 1 .22 2 .92 2 .92 2 .92 2 .75 2 .75 2 .75 3 .77 6 .95 3 .77 6 .95 3 .77 6 .95 3 .77 6 .77	8. 69 1. 08 6. 11 1. 47 1. 2. 53 3. 16 4. 2. 21 1. 47 1. 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 28 4. 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. 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1 . 10 1	4,600 7,211 1,69 0,48 3,56 4,00 1,97 4,00 1,97 4,00 0,67 5,14 4,00 0,85 5,44 4,50 0,85 5,44 5,27 6,20 1,80 1,80 1,80 1,80 1,80 1,80 1,80 1,8	3 .13 .1 .1 .44 .1 .98 .8 .91 .2 .56 .6 .11 .2 .63 .3 .80 .2 .94 .4 .60 .5 .86 .4 .78 .4 .60 .5 .5 .24 .4 .02 .2 .5 .3 .0 .29 .5 .5 .62 .1 .80 .6 .6 .3 .1 .21 .2 .7 .2 .7 .5 .6 .2 .2 .7 .5 .6 .2 .2 .7 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	5.21	5,40	5.55	1.04	3.04	0.55	0.43	0.00	0.30	2.05	0,23	3,49	

# SUMMARY OF STATISTICS

For Year Ending December 31, 1930

# Reading Water Department Reading, Massachusetts, Middlesex County

# General Statistics

Population by census of 1930: 9747. Date of construction: 1890 and 1891. By whom owned: Town of Reading.

Sources of supply: Filter gallery and artesian wells

Mode of supply: (Whether gravity or pumping): Pumping.

# Pumping Statistics

Builders of Pumping Machinery: Sullivan Mch. Co., Geo. F. Blake Mfg. Co., and Platt Iron Works.

Description of fuel used:

Kind: Coal.

Brand of coal: New River.

Average price of coal per net ton delivered: \$7.20.

Percentage of ash: Wood, price per cord:

Coal consumed for the year: 760,218 pounds.

Total pumpage for the year: 147,186,973 gallons, with allowance for slip.

Average static head against which pumps work: 218. Average dynamic head against which pumps work: 246.

Number of gallons pumped per pound of equivalent coal: 194.

147,186,973 gallons pumped x 8.34 (lbs.) x 100 dynamic head (246).

# 760,218 Total fuel consumed.

Equals: 39,596,652 including heating.

Cost of pumping figured on Pumping Station expenses including filtration, viz:

Per million gallons pumped: 115.66.

Per million gallons raised one foot (Dynamic: \$ .47.

# DISPOSITION OF BALANCE-Carried to New Account

Net cost of works to date \$551,139.46
Bonded debt to date 75,000.00

Cost of supplying water per million gallons figured on total maintenance of Pumping Station and filters: \$115.66.

Total cost of supplying water, per million gallons figured on total maintenance plus interest on bonds: \$494.92.

# Statistics Relating to Distribution Mains

Kind of pipe: Cast Iron.

Sizes: 4 inches to 12 inches.

Extended: 1375.5' of 12" — 555' of 8" — 3058.6' of 6" — 5' of 11/4"

Total now in use: 39 miles (6" to 12")

Cost of maintenance per mile 6.80

Number of hydrants (public and private) now in use: 251.

Number of stop gates added during the year: 19.

Number of stop gates now in use: 579.

Number of stop gates smaller than 4 inch: 130.

Number of blow-offs: 13.

Range of pressure on mains: 45-90.

# Services:

Kind of pipe: Cast iron, galvanized iron, lead and cement lined and copper tubing.

Sizes: 3/4 to 6 inches.

Extended: 4399.9 feet.

Total now in use: 35.89 miles.

Number of service taps added during year: 65.

Number now in use: 2453.

Average length of service: 1930: 67.69.

Average cost of service to owner, 1930: 29.89.

Number of meters added: 110.

No. of meters junked: 11.

Number now in use: 2597.

Percentage of services metered: 98%.

Number of motors and elevators added: 0.

Number now in use: 0.

# WATER BONDS AND INTEREST

There were \$10,000.00 in bonds payable in 1930.

The interest on serial bonds for the year 1930 amounted to \$2,282.50.

There are \$8,000.00 in bonds and \$2,917.50 interest due in 1931 as follows:

	Payable	Interest	Bonds
Water Bonds of Sept. 15, 1927	3/15/31	\$240.00	
Water Bonds of May 1, 1925	5/ 1/31	200.00	\$2,000.00
Water Bonds of June 1, 1907	6/ 1/31	120.00	1,000.00
Water Bonds of June 1, 1917-1918	6/1/31	270.00	1,000.00
Water Bonds of June 1, 1930	6/ 1/31	700.00	3,000.00
Water Bonds of Sept. 15, 1927	9/15/31	240.00	1,000.00
Water Bonds of May 1, 1925	11/ 1/31	160.00	
Water Bonds of June 1, 1907	12/ 1/31	100.00	
Water Bonds of June 1, 1917-1918	3 12/1/31	247.50	
Water Bonds of June 1, 1930	12/ 1/31	640.00	
To	tals	\$2,917.50	\$8,000.00

# KIND AND SIZES OF METERS IN USE JANUARY 1, 1931

MAKE	SIZES									
	5/8"	3/4"	1''	°1½′′	11/2"	2"	3''	4''	8"	TOTALS
Nash	1186	13	11	1	3	3				1217
Hersey	488	11	22	5	9	6	1	1	1	544
Empire	258	1	2				2		1	263
Gamon	184		2					١		186
Trident	127									127
Crown	74	2	2		3	9				90
Union	51		1		1					53
Lambert	51		2							53
Worthington	25					1				26
Pittsburg	13									13
Keystone	1			8						9
Federal	8									8
Thompson	5		1							6
Columbia	2									2
TOTALS	2473	27	43	14	16	19	3	1	1	2597

# WATER DEPARTMENT

The investigation for additional water supply which was started during the latter part of 1929 was continued during the early part of 1930. Twenty-nine wells were driven in three different areas. Four  $2\frac{1}{2}$  in. wells were driven in the Ipswich valley, just west of the pumping station. Nine  $2\frac{1}{2}$  in. wells were driven in Bear Meadow and sixteen  $2\frac{1}{2}$  in. wells in the Ipswich meadows, north of Grove Street, near the Wilmington line and in One Hundred Acre Meadow.

Metcalf and Eddy, a nationally known firm of consulting engineers, of Boston, was employed on this work, and the Board made a very thorough and careful investigation.

Wells in the first area were driven as far as possible to a maximum of 52 feet but no water bearing strata was found.

The wells in Bear Meadow were driven to various depths and some water bearing gravel was found, but attempts to pump for a dependable supply were not successful.

Investigation in 100 acre meadow, however, proved it to be a very satisfactory location where an excellent quality of water could be found and sixteen wells were driven and preliminary hand and power pump tests were made on them.

There are about eighteen square miles of drainage in this section, part of which is in Wilmington. The water bearing stratum was found, between 30 feet and 40 feet deep, and the wells were driven to this level.

During the first part of July, six of the wells in the last location were connected for a pumping test. The test itself was started July 10, 1930. A plunger pump, operated by a gasoline engine was used at this time. A careful pumping record was kept and the water tested daily for Carbon Dioxide. An exact analysis of the water was made every other day by Metcalf and Eddy.

On August 13, 1930, another test was started and the wells were pumped at the rate of 170 gallons per minute for seven days, during which time the State Board of Health, made daily tests and analyses of the water.

The reports from the State were entirely favorable to this supply and were to the effect that this water could be pumped directly into the mains for general consumption, without treatment. This development proved to be of the greatest value when, during October, owing to the long continued drought of 1929 and 1930, it became imperative to supply water to the system in addition to the very much depleted supply at the pumping station.

The additional supply was made available by connecting nine of the new wells to an electrically driven triplex pump and forcing the water through a temporary main, laid on top of the ground, into the system at Franklin and Grove Streets.

From October 30 to November 1, 1930, water was pumped from these wells at the rate of 180,000 gallons per day. The pumps were working against a pressure of one hundred pounds per square inch, in the mains and a vacuum of nine inches at the wells. This supply relieved an extremely grave situation for the water department.

The temporary pumping unit was kept in commission until the standpipe was built and at that time was again used for several days to fill the standpipe. The development of this supply should be carried on without interruption.

At the town meeting in March, 1930 it was voted to issue bonds to the amount of \$35,000.00 to build a new standpipe and lay necessary connecting mains. This bond issue is to be taken care of entirely from the water department receipts.

Metcalf and Eddy, Consulting Engineers, who were employed by the Board of Public Works on the additional water supply investigation were given the engineering work on the standpipe project. Bear Hill was chosen as the best location and on June 9, 1930 a contract was let to John McDonald Construction Co., for the construction of the foundation. At the same time the water department, with its own employees started to lay a twelve inch cast iron main from South Main Street, easterly along Hopkins and Cedar Streets, to the site chosen for the standpipe.

On June 16, 1930, a contract for the standpipe proper was let to the Pittsburg DeMoines Steel Co., and work was started on the steel fabrication at once. The erection of the pipe progressed steadily during the summer months and was completed in November and on the twenty-fifth of that month was full of water and in use as an integral part of the system. Owing to the cold weather the final coat of paint was not applied but sufficient money was held on the contract to insure satisfactory completion of the work in the spring of 1931.

There is now nearly three times as much storage capacity as formerly and the loss in pressure during the night has been lessened by more than half. The fire hazard during the summer was very great but we now have sufficient storage to meet an extraordinary demand.

Preparation should be made in the additional water supply for 1,000,000 gallons per day of 16 hours and developed at this time for 500,000 gallons per day, keeping the present pumping station, on Mill Street, in reserve for emergency drafts or greater consumption in hot weather.

The present mains from Grove and Franklin Streets will carry 500,000 gallons per day with fair efficiency but a 12 inch main should be laid in the next three or four years from that point to the square through Grove and Lowell Streets. Development of this additional supply would eliminate the hazards of a single force main on North Main Street from the pumping station to Franklin Street.

Hydrant inspections this year showed that very few hydrants were in any way out of order and only in a very slight degree. The general maintenance has been attended to and several hydrants have been raised to fit new street grading. Eight new hydrants have been set as follows: one on Pennsylvania Ave., two on west side of Reading square, one on Main Street at Park Ave., one on Main Street at Knollwood Rd., one on Cedar Street, one on Scotland Rd., one on Haven Street east of Main Street, (Mill Yard). The hydrant on Main Street opposite Avon was shifted to the north side on Avon near Main Street, and the hydrant on Forest Street, at Martin Road was shifted from the west side to the east side. Old hydrants were replaced with new ones at the corner of Pearl and Wakefield, on Franklin opposite No. 366, on Summer Avenue opposite No. 392 and on Haven opposite Gould, the last being a larger hydrant with two pump connections and two hose connections.

Owing to the general business depression only sixty-five new water services were installed this year. The total length however was one hundred and three feet more than last year, being forty-four hundred feet. To make these installations the distribution system was extended as shown in the table. One hundred and ten new meters were set during 1930 all of which were carefully tested in the meter department.

Tuesday, May 6, 1930, proved the wisdom of erecting a new standpipe. On that day 846,774 gallons were delivered to the system. The storage at that time was little more than one half of that amount. Today with our new standpipe in service we have about twice that volume in actual storage for just such an emergency.

I would recommend the immediate development of the additional supply, and consideration of a 12 inch main from the corner of Grove and Franklin Street to Reading Square, in the near future. Also the replacement of 1¼ in. pipe with a 6 in. or larger cast iron mains as the money becomes available.

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# 1930 Main Pipe Extension

	12"	8"	6"	11/4"	Total
Barrows Road			145.0		145.0
Bond St.			264.0		264.0
Brande Court			177.0		177.0
Cedar St	634.5				634.5
Gardner Rd			86.0		86.0
Hartshorn St			44.0		44.0
Hopkins St	711.0		30.7		741.7
Knollwood Rd			43.8		43.8
Lawrence Rd			323.0		323.0
Lowell St			313.0		313.0
Main St	12.0	555.0	144.0		567.0 144.0
Pennsylvania Ave			138.1		138.1
Percy Ave.			38.0		38.0
Scotland Rd.			394.0		394.0
South St			66.0		66.0
Third St.			378.0		378.0
Virginia Rd			137.0		137.0
Washington St			110.0		110.0
Wilson St			96.0	5.0	101.0
Winthrop Ave			131.0		131.0
Total	1,357.5	555.0	3,058.6	5.0	4,976.10

# In Memoriam



# George D. Putman

On July 28 of this year, Mr. George D. Putnam, an employee in the Water Department since 1898, passed away.

At the time of his death Mr. Putnam had attained the position of Superintendent of the Water Department. Owing to his zealous and dependable work, always placing his duties ahead of everything else, his face, the appearance of which, in numerous instances, meant relief in emergency, to a great many citizens of the town, has been very sadly missed since his death; but his faihtful work and the results thereof will always remain to remind us of him.

# HIGHWAY DEPARTMENT

To the Board of Public Works:

# Gentlemen::

The following is the yearly report of the Highway D Appropriations and Balances Voted in March Town Meeting, 1930:  1. Highway Maintenance and Construction	epartment :
including \$3,000.00 under Chapter 90 for	
Construction on Salem Street	\$ 50,000.00
2. Development of Storm Water Drainage .	13,289.28
3. Removal of Snow and Ice	5,000.00
4. Maintenance of Storm Drains	3,000.00
5. Sidewalk and Curbing Construction	8,000.00
6. Special Appropriation for Dumps	500.00
	\$ 79,789.28
Unexpended Balances from Previous Appropriations:	, ,
7. 1929 Improved Storm Water Drainage \$ 1,710.72	
8. Survey and Plans for Special Drainage . 1,000.00	
parameters of the final state of	\$ 2,710.72
Chapter 90—State and County Appropriations	
for construction of Salem St	5,913.32
Total 1930 Appropriations and Bal-	
ances	\$ 88,413.32
Expenditures and Balances of the above Appropriations:	
1. Appro. for Maint. and Const. \$50,000.00 Transferred to Salem St. a/c 3,000.00	
	\$ 47,000.00
Transferred from Salem St. a/c	43.34
	\$ 47,043.34
Expended:	
Payroll \$ 13,981.42	
General Repairs 2,714.80	
New Equipment         9,268.28           Road Material         9,417.02	
Road Material 9,417.02	

Tools, Misc. Supplies		11	1,560.39		
Total				\$	46,941.91
Balance Unexpended	Drainage			_	101.43 13,289.28 1,710.72
Expended:				\$	15,000.00
Pay Roll Pipe Tools, Misc. Supplies			5,559.05 5,661.47 2,623.29		
Total					14,843.81
Balance Unexpended 3. Appropriation for Snow and Id				\$	156.19 5,000.00
Expended: Pay Roll Sidewalk Plowing Tools, Supplies, Repairs, etc			2,207.26 838.13 4,249.82		
Total				\$	4,295.21
Balance Unexpended	• • • • • • •			\$	704.79
4. Appropriation for Maintenance Drains				\$	3,000.00
Expended:					
Pay Roll		\$ 2	2,073.86 339.05		
Total					2,412.91
Balance Unexpended				\$	587.09
5. Appropriation for Sidewalk an Construction			·	\$	8,000.00
Expended:					
Pay Roll Contractor Curbstone			,897.35 ,398.95 456.26		

Misc. Supplies			2,217.01		
Total					7,969.57
Balance Unexpende  6. Special Appropriation  Expended: Pay Roll Supplies	for Dumps	\$	149.41 343.00	\$	30.43 500.00
Total		_			492.41
Balance Unexpend 8. Survey and Plans for	ed	٠.		\$ \$	7.59 1,000.00
Expended: Pay Roll		\$	687.49		
Total		–		\$	68 <b>7.</b> 49
Unexpended Balan	ce	• • •		\$	312.51
Chapter 90—Salem St. Cor Town-State-County Transferred to High				\$	8,913.32 43.34
Expended:				\$	8,869.98
Pay Roll Road Material and	Supplies	\$	2,957.55 5,912.43		
Total				\$	8,869.98
Balance Unexpend	led			_	.00
	Totals				Balance
Items Appropriations	Expenditures		lance		Forward
1. \$47,043.34 2. & 7. 15,000.00 3. 5,000.00 4. 3,000.00 5. 8,000.00	\$46,941.91 14,843.81 4,295.21 2,412.91 7,969.57	15 7( 58	01.43 56.19 04.79 87.09 30.43		3 156.19
6. 500.00 8. 1,000.00	49 <b>2.</b> 41 687.49	3	7.59 12.51		312.51

New construction and drainage installation such as has been let out to contract in former years was taken over by the Highway Department this year. The Town was benefited very considerably in this manner, and the unemployed situation was particularly relieved as it kept many men at work, and the money was spent in the Town of Reading for both labor and material.

A total of 7300 feet of drain pipe was laid in sizes varying from 10 inches to 24 inches in diameter, as shown in the drainage table.

Six thousand seven hundred and thirty-three square yards of asphalt penetration macadam pavement was laid on Salem Street, westerly from the Wakefield line. The State, County and Town shared the expense on this work and it is hoped that the pavement will be completed to the Square in 1931. The pavement is 24 feet wide and will carry the traffic for the next ten years in all probability, and can easily be widened to 30 feet whenever desirable.

Traffic through the Square continues to increase steadily and with the completion of the northerly section of Main Street which will probably be started early in 1931, the demand for relief will be more imperative than ever. With this problem in mind the Board has requested advice from the State and County and also the consideration of financial aid in the reconstruction.

General surface maintenance was carried on through the summer, the streets being treated with tar or asphalt as seemed best and covered with sand or stone chips and rolled. 4000 gallons of Bermudez, 4260 gallons of tarvia "A" and 62,170 gallons of tarvia "B" were used on maintenance covering 212,000 sq. yards of surface.

At the March town meeting the following streets were accepted: Bond St., Hunt St., Hampshire Rd., Vale Rd., Virginia Rd., Weston Rd. (part).

These streets were all graded and surfaced with gravel and treated with tarvia, covering an area of 7750 sq. yds.

At the fall town meeting the following streets were accepted: Hanscom Ave., Weston Rd., (part), Henzie St., Tower Rd., Longview Rd., Palmer Hill Ave. This meeting was so late in the season that no work has been done on the accepted portions of these streets,

Early in the season a drain was laid from Woodward Avenue through private property and Vale Road across Vine to the northerly end of Bond Street, a distance of 1581 feet which relieved a bad situation on Woodward Avenue and eliminated a considerable amount of open ditch.

A drain was laid on Salem Street to take water from the Square at John Street and flooding of private property in this section, which occurred with every heavy rain was entirely stopped.

Considerable trouble was experienced on Pleasant Street because of the flat grade and 616 feet of drain was laid from Eaton Street westerly to the brook.

By far the largest project was on Woburn Street, westerly from Wenda in which a drain 2,436 feet long was laid to take care of portions of Woburn Street, Summer Avenue, Prospect Street and Copeland Avenue.

Harriman Avenue at Deering Street is a low spot where rains flooded the cellars on many occasions and the Board voted to lay 435 feet of drain to High Street which solved that problem.

Late in the fall 837 feet of drainage was laid on Summer and Fairview Avenues to conform to the general drainage program. This eliminated an open ditch through private land and took considerable water from the gutters. 11,500 feet of open ditch was cleaned out this fall.

The sooner the drains are laid and water removed from the streets that much sooner will it be possible to maintain the road surface in better condition at less expense. The drainage at the northerly end of the square should be taken care of in 1931 as a large amount of water flows over the surface during every rain.

### Sidewalks

Cement concrete sidewalks were laid in 1930, by the Department of Public Works, the average cost being \$2.04 per sq. yd. This was a saving of about \$1.00 per sq. yd. over the general contract prices. There were 2,341 sq. yds. laid as shown in the table.

Tar concrete sidewalks were laid as shown to the extent of 2030 sq. yds. Most of this work was resurfacing as required by the bad condition of the old walk.

Stone dust was used to cover 9410 sq. yds. of sidewalk and gravel was used to build 1502 sq. yds. of sidewalk. The gravel will serve as a good base for a concrete walk later on.

In connection with the sidewalk work I would recommend the purchase of a concrete mixer similar to the machine used this year.

Curbing, to keep highway traffic from encroaching on the sidewalks and lawns, was set at the following corners: Village and Green, Mount Vernon and High, King and Berkeley, Bancroft and Lowell, Linden and Middlesex, Salem and Main.

There are yet many corners that should be curbed as a protection to both life and property.

Straight curbing was set as requested by property owners and determined by the Board of Public Works to the extent of 135 feet.

177 street signs have been purchased this year and most of them have been set up. This is one improvement that is very noticeable, particularly to strangers in town.

Because of the increased activities of the highway department we are more crowded than ever at the garage and many pieces of machinery have to be left out in the open at all times and in order to work on some pieces of machinery it is necessary to put others outside. A municipal garage capable of housing the highway, park, sewer and water departments should be seriously considered in the very near future. The problems connected with rolling in the highway work are much more difficult with a steam roller than they would be with a gasoline driven roller, owing to the fact that a steam licensed roller engineer must be on the machine. Although we are still able to hire steam licensed men for short periods, it is always unsatisfactory and requires concentration of the roller work which is not always convenient or economical. I would recommend the purchase of a gasoline driven roller.

# 1930 DRAINAGE CONSTRUCTION

# Cement

Street	Length	Width	Sq.Yards
Bancroft Ave.	104.10	4.50	52
Dudley St	780.00	4.50	390
Haven St	338.50	10.00	376
High St	808.00	5.00	449
Lowell St	211.50	6.00	141
Main St	461.50	10.00	513
Temple St	616.00	5.00	342
Union St.	140.00	5.00	78
		Average width	Sq. yds.
Total	3459.60	6.25	2341

Tar											
								Sq. Y	ds.		
Bancr	oft Ave.						. 51				
	St										
	ont St										
	1 St										
	n St										
	St										
	esex Ave										
	orn St						-				
Wobu	rn St										
	Total		lonec			• • • •	. 2030				
587.95 tons of N	a 5 stan				400	0.410			020		
307.93 tons of N	o. 5 stone	e (a) 1	o sq. : <b>Grav</b>		ton=	9,410 8	sq. yas	. III I	.930		
			Grav	ei				Sq. Y	de		
Grove	St							oq. I	us.		
	com Ave										
	ins St										
	ant St										
	St										
	ner Ave.										
All 19	30 sidewa							Sq. Y	ds.		
	1930 DR	AINA	GE C	CONST	RUC'	TION					
	Catch										
Street	Basins	10"	12"	15"	18"	20"	21"	24"	Total		
Bond St							522		522		
Copeland Ave			181						181		
Fairview Ave			31		254			312	597		
Hancock St			335						335		
Harriman Ave						140			140		
High St	3				295				295		
Main St	3			330					330		
Pleasant St		230	386						616		
Prospect St			300			#			300		
Salem St	2		2.4	0.4		562					
Summer Ave			31	365	1.0				401		
Vale Rd	3			475	16				491		
Vine St	3		07		325	770		200	325		
Woburn St	10		97		385	778		299	1559		
Woodbine St		90	162 144	25					162 249		
Woodward Ave.	4	80	144	45					249		

55 310 1667 1195 1515 1480

522 611 7300

Total .....

# PARK DEPARTMENT

# Gentlemen:

The following is the yearly r	еро	rt of the	P	ark Depa	ırtr	nent:
General Appropriation					\$	5,000.00
Expended						
Memorial Park:						
Pay Roll, Care of Park	\$					
Supervised Play		724.00 1,818.33				
Bills	_	1,010.33				
Total			\$	3,383.77		
Common and Main Street Parks:						
Pay Roll	\$	350.80 777.25				
Bills	_					
Total		•	\$	1,128.05		
Leach Park:		<b>50.10</b>				
Pay Roll	\$	59.13				
Total			.\$	59.13		
Washington St. Park:			i			
Pay Roll	.\$	296.50				
Bills		125.64				
Total			\$	422.14		
Summary Expenditures:						
Total Pay Rolls			\$	2,271.87		
Total Bills				2,721.22		
Total					\$	4,993.09
Balance Unexpended				_		6.91
Birch Meadow Appropriations						3,000.00
Expended:						
Pay Roll	\$	484.99 2,03 <b>7.12</b>				
Bills		2,037.12				
					\$	2,522.11
Datanas IInavaandad					•	477.80
Balance Unexpended					\$	477.89

### **PARKS**

Birch Meadow has been under consideration for some time as a park and playground and in the March meeting this year an appropriation of \$3,000 was made in this connection. During the year land comprising the greater portion of the meadow was acquired. While So. Main Street was under reconstruction, material was purchased from the contractor and used to make an entrance from the northerly end of Bancroft Avenue, and also fill a section of the meadow next to the entrance. In the fall a tennis court with a hard surface was built on the new fill, and players from all sections of the town used this court till the winter weather set in.

Memorial Park has proved itself more valuable to the children and the town than ever before. Climbing apparatus was erected and proved to be very popular. A Giant Stride was set up and was continually in use after it was ready for the children.

A large area of the lawns was plowed, harrowed, smoothed and seeded. This meant a much larger area for the children to use for games. A new power mower was purchased and the grass was kept mowed all the time.

At the beginning of the winter the brook was again blocked at the dam and the entire area between the dam and Charles St. was flooded. The ice was lighted at night and a section blocked off for hockey games. A great many skaters enjoyed the ice day and night, particularly during the holidays.

The ball park where the baseball and football games are played was kept mowed throughout the season and in the fall the rougher part of the land was plowed and harrowed. Shrubbery was set out just inside the fence on Washington St.

Grass, shrubbery and trees were regularly cared for at Leach Park and the improved appearance was well worth the cost.

The northwesterly section of the Common was plowed, harrowed, rolled and seeded. A barberry hedge was set out on the Salem St. and Lowell St. sides. Rhododendrons were set under the elm trees and small evergreens were set in the corners.

The band stand was moved from the Common and set up in Memorial Park where it may be used for concerts or other gatherings.

Just before Christmas two evergreen trees were set in the Common, one of these, a fine blue spruce, was donated by Mr. Henry Johnson. During the holiday season the parks and trees were so well illuminated by the Municipal Light Department that the most favorable criticism was attracted from the newspapers.

Results as a whole were very satisfactory and work should be continued on the Common to make it a very attractive center.

Several hard surface tennis courts should be built in Memorial Park and at least three more in Birch Meadow.

Park areas and playground advantages have increased considerably and it is unquestioned that money used in this manner is well spent.

The supervised play under the direction of the Reading Woman's Club, with Mrs. F. M. Day as chairman and Miss Josephine Turner as director was conducted in a most excellent manner.

### REPORT OF THE READING PLAYGROUND COMMITTEE

To the Board of Public Works: Gentlemen:

The twelfth season of the Reading Playground opened July 1, with informal exercises.

Mrs. James Fairchild represented the Women's Club and gave an interesting talk to the children. The donors of the Park were invited to be present. Ice cream was served free to about 250 children and games played.

Miss Josephine Turner, Supervisor, a graduate of Posse Nissen school was assistant supervisor last year and well known to the children.

Classes in reed and coping saw work under Miss Lyons' supervision were very popular. The doll house presented to the children by Miss Turner was painted and furnished very attractively under Miss Briggs' direction and the children were very enthusiastic about this work.

Tennis was greatly enjoyed by children of all ages. The courts were always in use.

Checkers, boxing, croquet, track and baseball kept many occupied.

The last week was a very busy one. On Tuesday, a Mother Goose Safety Play was presented by the children. Seats were placed on the lawn for the large audience. The costumes were made by the children. Dancing and stunts by the girls were also given. The natural setting of vine covered stone walls and trees was very effective.

Closing day was given to tennis finals and track events. Certificates as rewards of merit and prizes were awarded.

Free ice cream was given to the children and some very fine reed and coping saw work exhibited.

The Playground Safety News sent us by the Massachusetts Safety Council was distributed twice a month. Safety songs and slogans were taught by this means.

A new jungle gym and giant stride were installed. Clock golf was laid out and very popular.

The committee wishes to thank the Board of Public Works for its helpfulness at all times. Thanks, also, to the Reading police for co-operation, Steele Furniture Co., for linoleum and roofing for doll house.

### Respectfully submitted,

MRS. WALTER F. TAYLOR
MRS. DENNIS A. CUMMINGS
MISS ANNA P. REID
MISS LYDIA HOLDEN
MRS. FRED M. DAY, (Chairman).

To the Board of Public Works:

### Gentlemen:

The Playground Committee would recommend that the sum of one thousand dollars (\$1,000.00) be appropriated by the Town of Reading for the work assigned to it.

It would suggest that the sum be not definitely divided for salaries and expenses.

MRS. FRED M. DAY, Chairman.

### SEWER DEPARTMENT

To the Board of Public Works:

### Gentlemen:

The following is the yearly report of the Sewer Department:

### Construction and Maintenance:

Balance Brought Forward Receipts for 1930	\$ 12,363.60 11,460.10
Total	\$ 23.823.70

Construction Account:		
Expended:  Pay Roll \$ 5,732.91  Bills 2,692.99		
Total	\$ 8,425.90	
Maintenance Account:		
Expended:		
Pay Roll       \$ 2,250,21         Tools, Supplies, Repairs       619.80         Payment of Bonds       9,000.00		
Total	\$ 11,870.01	
Maintenance and Construction Pay Roll and Bills		\$ 20,295.91
Balance		\$ 3,527.79
HOUSE CONNECTION ACCO	UNT	
Balance Brought Forward Cash Receipts 1930		\$ 200.00 2,167.41
Total		\$ 2,367.41
Expended:		
1. Pay Roll       \$ 1,132.62         2. Refunds       398.71         3. Pipe       235.14         4. Misc. Supplies and Repairs       163.41         5. Transfer to Maint. Account       237.53		
Total		\$ 2,167.41
Balance		\$ 200.00

### SEWER DEPARTMENT

Extension of the sewer system was started early in the season, using the regular force and as much of the local labor as could be taken care of, the number of workmen varying with the progress of the construction.

One extension was laid in High, Mt. Vernon, School and Dudley Streets, a distance of two thousand five hundred and forty-one feet. There are forty possible connections in this section, eight of which are now in use.

Short extensions were made on Bancroft Avenue and on John Street of two hundred thirty five feet and two hundred sixty six feet respectively.

On Pleasant Street an extension of six hundred thirty one feet was laid, easterly from Middle Street. There are fourteen possible connections of which one has been made.

The total extension of sewer mains this year was three thousand six hundred seventy three and twenty two hundredths feet and thirty two house connections were made with a total of one thousand six hundred twenty five linear feet.

General inspection and flushing of sewers has been carried on as usual in accordance with the regular maintenance program. The inspections however indicate that there is considerably more leakage from the under ground water than should be allowed and also that a more definite method of cleaning the sewers should be used. For this work I would recommend a turbine sewer cleaning machine, and a regular crew for this work. No work of this nature has been done before because the system was new and did not need it, but the time has come when it is necessary to start a regular maintenance crew on the sewer cleaning and inspection work.

If the investigation which the Board of Public Works is now making, results in lower rates for the use of the sewer, it is very probable that more property owners on streets where the mains are now laid, will take advantage of the sewer benefits.

This will result in a greater income without the expense of laying new extensions to the system.

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## STREETS

	Possible	Completed	Per Cent	No Con-	Connected	Partially	Revenue
Streets	Con-	Con-	Con-	struction		Installed	
	nected	nections	nected	Started	Line	to House	1930
Arlington	11	3	27	5	2	1	\$27.00
Arlington	17	8	47	9		1	214.20
Bancroft	22	8	36	13	i		109.50
Berkeley	27	16	59	11			296.70
Brook	1			1			
Center Ave	10	· <del>;</del>	70		3		111.60
Copeland Ave	7	7	100				233.40
Dudley	10	4	40	6			
Eaton	2	2	100				6.00
Elliott	5	2 4	40	3			28.50
Fremont	4	1 1	100	٠,٠			67.20
Fulton	3	3	100 100				18.60 43.50
Gould	53	34	65	10	4	5	540.88
Harnden	8	6	7.5		2		171.90
Haven	39	27	68	7	3	2	953.70
High	14	5	35	7	2		66,00
Hillcrest Rd	10	8	80	1	1		172.80
Howard	18	15	83	2	1		238.80
John	16	7	42	8		1	57.30
King	5	5	100	1 :			95.40
Kingston	15	10	67 57	5			113.70
Lincoln	7	4 5	56	3	3	i	128.10 86.70
Linden	4	3	75	1			42.90
Lowell	44	34	77	î	7	2	1,402,20
Maple	2	i	50		i		9,00
Middle	2	1	50	1			6.30
Middlesex Ave	18	14	77		2	2	272.03
Minot	12	8	67	1.2	2	2	82.80
Mt. Vernon	23	6	26	17		1:	61.50
Park Ave	7 7	6 5	86 72	2		1	56.10 48.90
Parker Perkins Ave	7	7	100				194.10
Pine Ave	i	i	100				174.10
Pleasant	27	13	48	14			144.00
Pratt	4	3	7.5	1			36.00
Prescott	53	37	70	1	9	6	508.50
Prospect	15	7	47	8	1.		168.90
Salem	18	9	50	2	7	2	238.20
Sanbern	14	8	56	4 7			155.10
School	10	3	30 100	1			7,80
Scotland Rd	-18	8	44			i	148.20
Summer Ave Sweetser Ave	5	* 1	20		3	i	14.10
Temple	32	6	19		20	6	428,40
Union	5	3	60	1		1	52.20
Village	22	10	45	11		1	164.18
Warren Ave	17	13	78		2	2	171.90
Washington	27	10	37	12	4	1	154.80
Wenda	4	4 7	100 70			i	54.90 44.70
Wilson	10 80	40	50	9	27	4	638.80
Woburn		40			21		030.00
Totals	803	460	58%	194	106	43	\$9,083.99
			1				

## LENGTH OF SEWER CONNECTIONS RUN TO EITHER CURB, HOUSES, OR CONNECTED

Streets	Curb	Houses	Connected	Total Length
Arlington	66.50	46.00	175.00	287.50
Ash			331.10	331.10
Bancroft	16.00		396.90	412,90
Berkeley			925,70	925.70
Brook				
Center Ave	52.00		317.00	369.00
Copeland Ave			450.00	450.00
Dudley			185.00	185.00
Eaton			106.00	106,00
Elliott			115.00	115.00
Fremont			209.00	209.00
Fulton			44.00	44.00
Gould			236.50	236,50
Green	72.00	173.00	1,461.20	1,706.20
Harnden	32.00	70.00	195.00	227.00
Haven	186,00	79,00	1,107.80	1,372.80
High	22.00		. 209.10	231.10
Hillcrest	25.00		516.00	541.00
Howard	26.00	27.00	886.50	912.50
John		37.00	265.20	302.20
King			306.70	306.70
Kingston	70.00		407.00	407.00
Lincoln	70.00		186.00	256.00
Linden		41.00	219.00	260.00
Lowell		\	232.50	232.50
Main	256.00	99.00	1,836.75	2,191.75
Maple	18.00		40.00	58.00
Middle	40.00	4.20.00	36.50	36.50
Middlesex Ave	48.00	138.00	983.20	1,169.20 450.00
Minot	42.00	77.00	331.00	
Mt. Vernon		27.00	321,50 208,00	321,50 245,00
Park Ave		37.00	232,50	232.50
Parker			434.80	434.80
Perkins Ave.			46.00	46,00
Pine Ave			722.50	722.50
Pleasant			242.00	242.00
PrattPrescott	204,00	269,00	2,436,20	2,909,20
Prospect		209,00	594.50	594.50
Salem	110,00		642.00	752.00
Sanborn	110.00	98.00	575.40	673.40
School		90.00	168.00	168.00
Scotland Rd.			60.00	60.00
Summer Ave		94.00	576.20	670,20
Sweetser Ave.	64.00	45.00	43.00	152.00
remple	300,00	173.00	505.00	978.00
Jnion		66.00	177.00	243.00
/illage		34.00	484.00	518.00
Warren Ave	36.00	68.00	565.00	669,00
Washington	61.00	48.00	587.40	696,40
Wenda	01.00	10,00	202,50	202.50
Vilson		43.00	287.40	330,40
Woburn	458.00	222.50	2,526,40	3,206.90
Totals	2,164.50	1,887.50	25,347.95	29,399.95

## LENGTH OF MAIN SEWERS IN STREETS

	1	1	1		1	(	1	1	1 6 6
Streets	6 itch	8 inch	10 iach	12 inch	15 inch	18 inch	20 inch	24 inch	Total
Arlington		399.80							399.80
Ash		822.90		1	258.80				1081,70
Bancroft		1015.00							1015.00
Berkeley		1256.10							1256.10
Brook							,	847.60	847.60
Center		620.60							620,60
Copeland									500.00
Dudley		374.50							374.50
Eaton					907.70				907.70
Elliott		279.00							279.00
Fremont									456.50
Green	175.20	1717.40							2714.20
Harnden		559.30							559.30
Haven			1220 0 5	726 10					1772.80
High		770.00	1338.05	736.10					2074.15
Hillcrest	300,00	770.80							770.80
Howard		1110.00						2722.00	1410.00
Interceptors John		205.00 266.00						2732.00 178.50	2937.00 1014.10
King		175.00						178.50	515.00
Kingston		719.30							719.30
Lincoln		719.30	573.40						1111.50
Linden		735.30	373,40						735.30
Lowell		813.10							813.10
Main		1246.10					234.90		2436.50
Maple		189.20							189.20
Middle		313,60							313,60
Middlesex		1111.50							1111.50
Minot		1409.65							1409.65
Mt. Vernon		698.52	160.00						858.52
Park		507.30	322.70						830.00
Parker		427.00							427.00
Perkins		400.00							400.00
Pine		226.00							226.00
Pleasant		1496.80		469.80					1966.60
Pratt		555.50							555.50
Prescott				1174.10					3439.40
Prospect		1260.00							1260.00
Salem		1004.90							1137.40
Sanborn		716.30							716.30
School		688.25							688.25
Summer		1229.40							1229.40
Sweetser			cast iron						334.30
Temple			432.89	661.39					1991.04
Union		303.60							303.60
Village		1015.60							1503.40
Warren		715.00			212.00		1574.30		715.00 2558.90
Washington Wenda	200.00	424.90		240.80	312.90				300.00
	300.00		471.40	222 10					804.50
Wilson	732.80	2915.70	4/1.40	333.10 917.40					4565.90
woburn	732,80	2915.70		917.40					4303.90
Tot. lengths	2744.76	36,002.82	3298,44	6164 79	2870.60	487.80	1809 20	3758.10	57,136.51
Loc. Ichgells	2177,10	00,002.02	0270,11	0101,19	2070.00	107,00	1307.20	0700.10	444

Total length of House connections constructed to date. 29,399,95

Total length of Sewers and Underdrains constructed to date. 91,162.06

Grand Total 120,562.01 ft. or 22.83 miles of pipe

## LENGTH OF UNDERDRAINS IN STREETS

	Len	gth of Unde	rdrains in St	reets		Total Length
Streets	5 inch	6 inch	8 inch	10 inch	Total Length	Sewers and Underdrains
Arlington						399.80
Ash	237.00			258.80	495.80	1,577.50
Bancroft						1,015.00
Berkeley		456.00			456.00	1,712.10
Brook		847.60			847.60	1,695.20
Center	620.60				620,60	1,241.20
Copeland						500.00
Dudley		380,00	527.70		907.70	374.50 1,815.40
Elliott		300.00	327.70		901.10	279.00
Fremont		456.50			456,50	913.00
Green	836.90	974.10			1.811.00	4,525.20
Harnden					1,011100	559.30
Haven		588.20			588.20	2,341,00
High		487.70	736.10		1,223.80	3,297.95
Hillcrest		450.40			450.40	1,221.20
Howard		1,410.00			1,410.00	2,820.00
Interceptors		2,937.00			2,937.00	5,874.00
John		748.10			748.10	1,762.20
King	609.30	175.00 110.00			175.00 719.30	690.00 1,438.60
Lincoln		110.00	1,111,50		1.111.50	2,223.00
Linden	290.40	444.90	1,111.50		735.30	1,470.60
Lowell	270.10	111.50			700.00	813.10
Main		1,246,10	955.50	234.90	2,436.50	4,873,00
Maple	189.20				189.20	378.40
Middle						313,60
Middlesex	254.00				254.00	1,365.50
Minot	972.65	437.00			1,409.65	2,819.30
Mt. Vernon	507.30	230.30	322,70		230.30	1,088.82
Park					830.00	1,660.00 427.00
Parker						400.00
Pine	226.00				226.00	452.00
Pleasant	220.00		469.80		469.80	2,436,40
Pratt	252.20	303.30			555.50	1,111.00
Prescott	1,070.60	2,091.80			3,162.40	6,601.80
Prospect	886,00				886.00	2,146,00
Salem	543.00		132.50		675.50	1,812.90
Sanborn	200,00				200.00	916.30
School						688.25
Summer	175.00				175.00	1,229.40 509.30
Sweetser Temple	175.00	40.00			40.00	2.031.04
Union		40.00			40.00	303,60
Village		825.00			825.00	2,328,40
Warren	715,00				715.00	1,430,00
Washington		724.00	246.80	1,163.20	2,134.00	4,692.90
Wenda						300.00
Wilson			804.50		804.50	1,609.00
Woburn	1,196.00		917.40		2,113,40	6,679.30
Total Lengths	9,781.15	16,363,00	6,224.50	1,656,90	34,025.55	91,162.06

# REPORT OF EXECUTIVE OFFICE OF BOARD OF PUBLIC WORKS

To the Board of Public Works:

Gentlemen:

The following is the yearly report of the executive office:

Expended:	and Misc. Supplies	\$ 5,996.26	\$ 6,000.00
Total .			\$ 5,996.26
Balance			\$ 3.74

The following table shows the expenditures made this past year in all departments, the payroll of each, and the entire expenditures of the Board of Public Works:

 Board of P. W.
 Water Dept.
 Highway Dept.
 Sewer Dept.
 Park Dept.
 Totals Dept.

 Pay Roll . \$4,854.92 \$ 22,909.20 \$32,513.39 \$ 9,115.74 \$2,756.86 \$ 72,150.11

 Bills . . . . 1,141.34 80,981.45 53,999.90 13,110.05 4,758.34 153,991.06

Totals ... \$5,996.26 \$103,890.63 \$86,513.29 \$22,225.79 \$7,515.20 \$226,141.17 April 21, 1930.

Mr. Martin B. Hartshorn Chairman, Board of Public Works Reading, Mass.

Dear Sir:

In accordance with your instructions an investigation has been carried on for several months, to determine the possibility of increasing the Reading water supply by means of a new system of wells. A number of test wells have been driven, pumping tests have been made, and samples of water analyzed with the results given in the following pages:

Possible Sources of Additional Water Supply. There are five possible methods of obtaining an additional water supply to which consideration should be given:

1. Extension of present system by the construction of deep wells near the present pumping station, by an extension of the filter gallery, or by shallow wells.

- Development of one or more well systems in new areas within the limits of the town, involving the construction of one or more pumping stations and pipe lines.
- Enlargement of the treatment works to permit taking an adequate supply of surface water from the Ipswich River.
- Entrance into the Metropolitan Water District and the use of metropolitan water for the whole or part of the Town's supply.
- 5. Purchase of water from the town of Wilmington, or some other adjoining municipality.

In this report the discussion will be limited to the first three possible methods, although careful consideration should be given to each of the other methods listed before deciding on the best method for the Town to adopt.

**Supply from Ipswich River.** Brief reference will be made to the possibility of using surface water from the Ipswich River, as it has a bearing on the present supply works.

In the report of Mr. M. M. Tidd, engineer, upon the completion of the water works system in 1891, reference was made to a 12-in. pipe running directly from the pumping station to the Ipswich River, for use in case of emergency, to draw water from the river to supplement the water obtained from the filter gallery. There is also a reference indicating the possibility of there having been a second pipe connection with the river, perhaps that now used as a drain. Although it was the intention to keep the river connection closed by gates provided for the purpose except in emergency, the increased draft in recent years has made it necessary at times to draw on river water to supplement the supply from the ground. The absence of meters on the supply lines, has made it impossible to determine the amount of water so drawn. Chlorinating apparatus has been installed in the pumping station, to chlorinate any water drawn directly from the river, in order to sterilize it before it is pumped to the distribution system.

The use of the river water in 1923 led the State Board of Health to urge that "an investigation be begun as soon as practicable, for the purpose of obtaining an adequate water supply for the Town from some suitable source." In accordance with this recommendation the Town employed Mr. Frank A. Barbour, engineer, to make an investigation, and his report on an improved water supply was presented in July, 1924.

The water of the Ipswich River is highly colored at times which together with its softness would add to the difficulties of treatment. The watershed at the pumping station includes the village of Wilmington Centre and for that reason the water is subject to pollution by domestic sewage. Although at the present time the extent of pollution is not excessive it is likely to increase as the population becomes greater in density.

During dry weather the flow of the river is reduced to so low a point as to be inadequate to meet the future needs of the town unless the dry weather flow can be augmented by building a large storage reservoir. There is no good site available for such a reservoir within a practicable distance of the town, although one or more sites have been suggested for construction by a group of towns or cities acting as a water district.

While the storage of the river water in a large reservoir would improve the quality of the water, it still would be necessary to treat it in a modern water filtration plant, in order to make it safe and satisfactory for domestic use.

Possible interruptions in such treatment, although of infrequent occurance make it undesirable to take water from a hazardous source if a more satisfactory water can be obtained at a reasonable expense from some other source not subject to similar hazards of pollution.

Present Sources of Water Supply. The supply of water is now obtained from the old filter gallery near the pumping station and from five deep wells drilled in the vicinity. As previously stated, water has been taken also directly from the river.

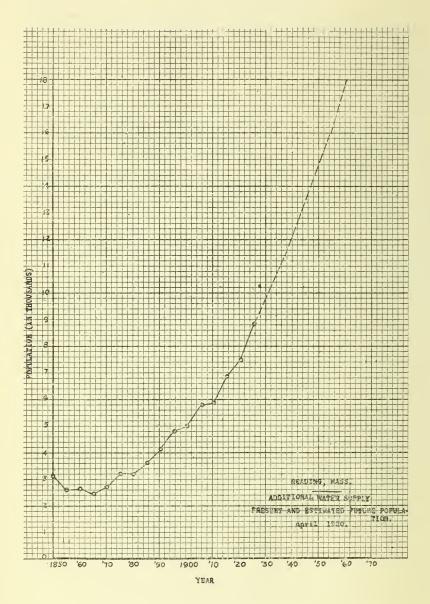
Dependable Capacity of Present Supply Works. The absence of meters upon the several sources of supply, already referred to, make it impossible to determine the dependable capacity of the filter gallery or of the deep well system. A test was made in February and March, 1924, under Mr. Barbour's direction, to ascertain the capacity of the deep well system. This test was made at a time of year when ground water is normally at its maximum height and for that reason the test may have indicated a greater capacity for the wells than would have been obtained if the test had been made during the dry season in the summer. It was hoped to determine the capacity of the wells by pumping continuously from them for a substantial period during which time no water would be drawn from the filter gallery or river. The results were not altogether conclusive, because the water consumption demands were so great that it was necessary during the test to draw some water from the filter gallery, and without being able to determine just how much was so drawn.

After having made a study of the amount of water pumped, the depth to which the water in the wells was lowered during the test, the time required for the return of the ground water to its original level, and the allowance to be made for the season of the year during which the test was made, it was concluded by Mr. Barbour that the wells could be depended upon during a dry season for a supply of not more than 150,000 or possible 175,000 gallons per day (g. p. d.), based on continuous pumping. The action of the ground water level during these tests, and other conditions, led Mr. Barbour to believe that it would be impracticable to materially increase the supply of water by drilling additional deep wells in the vicinity of the station.

Mr. Barbour estimated that the filter gallery could be depended upon in a dry season for not more than 200,000 g. p. d. making the estimated total dependable capacity of the present ground water supply about 350,000 g. p. d.

No attempt has been made to check these estimates of dependable capacity, and it would be difficult to get a better check without installing meters on the several supply mains. The examination by means of test wells, made under our, direction during the past few months, has convinced us that the underground in the vicinity of the pumping station is not favorable to a material increase in water supply, and that the capacity of the works in this area should not be depended upon for a greater amount than that indicated by Mr. Barbour's estimates.

Water Consumption. The estimated population and water consumption of Reading, from 1892 to 1929, inclusive, are shown in Table 1. Fig. 1 shows graphically the past and estimated future population of the town and Fig. 2 the average daily consumption of water, and the average daily consumption per capita. In 1929 the average consumption for the year was 39.9 gallons per capita per day (g. c. d.). This is an unusually low figure, even considering the fact that 97.5% of the services are metered. A survey made by the Pitometer Company in 1928, indicated that there was only a very small amount of leakage from the mains. Although the consumption has been estimated from the displacement of the pumps allowing 10% for slip the figures would be only slightly increased if this allowance were reduced to 3% instead of 10%.



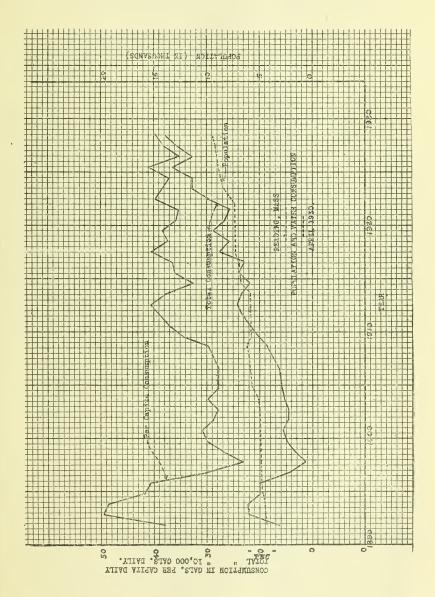


Table 1. Estimated Population and Annual Average Water
Consumption at Reading, Mass.
1892-1929.

Annual average water consumption Year Estimated \* Mil. gals. Gals. per cap. population per day per day 1892 4,308 .165 38.0 .222 1893 4,466 50.0 1894 4,592 .224 49.0 1895 4,717 .199 42.0 1896 4,843 .199 41.0 1897 4,818 .143 30.0 .113 23.0 1898 4.868 1899 4,919 .131 27.0 1900 4,969 .149 30.0 .157 31.0 1901 5,019 1902 .146 29.0 5,070 .146 28.0 1903 5,119 .154 30.0 1904 5,171 1905 5,682 .158 28.0 1906 .165 28.0 1907 5,967 .175 29.0 1908 6,110 1909 6,252 .186 30.0 1910 5,818 .205 35.2 .221 37.5 1911 5,845 .234 1912 5.872 39.0 1913 5,900 .244 41.0 5,927 .235 38.0 1914 6,805 .22 32.9 1915 1916 6,950 .24 36.2 1917 7,050 .25 36.8 .279 40.8 1918 7,397 .26 1919 7,350 37.8 7,424 .29 38.7 1920 1921 7,424 .27 36.1 1922 7,424 .26 35.6 1923 7,600 .30 40.0 8,500 .33 38.6 1924 8,796 .33 37.4 1925 1926 8,950 .37 41.4 1927 9,200 .33 35.4 9,350 .36 38.5 1928 1929 9,600 .38 39.9

<sup>\*</sup>The five-year figures are from the U. S. and State Census.

Intermediate figures estimated by M. & E. from the curve.

The records of water consumption by other towns and cities in the suburban area about Boston, indicate that a figure of 40 g. c. d. is too low a figure to use as a basis for estimates of future needs. In our judgment it would be wise to provide for a future consumption for the Town of Reading of at least 75 g. c. d.

The population curve shown in Fig. 1 indicates the possibility of a population of the town in the year 1960 of 18,000 as against a present population of about 10,000. The curve has been predicated upon the record of past population in the town and upon the growth of other towns of a more or less comparable nature, since the time that their populations were equal to that of Reading in 1925.

For a major expenditure such as an additional water supply, bonds would be issued for a period of at least 25 years and probably 30 years, the maximum allowable under the statute; and such a supply should be capable of providing for the needs of the Town for a similar period of time. On the basis of the 1960 estimated population (18,000) and an average consumption of 75 g. c. d. the total average consumption would be 1,350,000 g. p. d. While it is not necessary to provide for a dependable supply in this amount at the present time, it would be desirable to construct works that would increase the capacity to more than half of this amount. A dependable capacity of at least 500,000 gallons per day should be provided now by additional works, making the total dependable capacity of the water works about 850,000 g. p. d.

During 1929 the maximum 24-hours, consumption was about 700,000 g. p. d.

Extension of Present Collecting System. As it would be more economical, if possible, to use the present pumping station in connection with an increased water supply, test wells were driven in the Ipswich River Meadows a short distance above the filter gallery, even though wells in this area were attempted in 1915 with unfavorable results.

The new tests were made with the intention of exploring the material of the valleys to a greater depth than had been reached in the previous tests, in order that the hope of obtaining water from this area might not be abandoned without more positive evidence that this source could not be used. Four wells, Nos. 1 to 4 inclusive, were driven, each of which penetrated fine material and reached rock without passing through water-bearing material. The first well was driven at the edge of hard ground and the other wells were located out into the valley and nearer the river. (See Fig. 3). The materials encountered by these wells are shown in Fig. 4, and a detailed description is given in Appendix A. All of the wells were driven as deep as possible, two of them reaching a depth of over 50 ft. It was impossible to obtain any material amount of water by pumping. As these results were unsatisfactory and

confirmed the earlier tests it was decided to abandon further attempts to find favorable conditions within reach of the present pumping station.

(Note: Figures 3 and 4 could not be reproduced in this report but are on file at the office of the Board of Public Works.)

Examination of the Bear Meadow Brook Area. The work of driving test wells was then commenced in the Bear Meadow area in which wells Nos. 5 to 13 inclusive were driven. The locations of these wells are shown on Fig. 3 and the material encountered on Fig. 4. The first well in this area, No. 5, struck rock at a depth of 28 ft. Well No. 6 was driven to a depth of nearly 89 ft, without encountering water-bearing material. In the third well, No. 7, which was the deepest well driven, (97 ft.) some coarse sand was found, but it was possible to pump but a very small amount of water. The fourth well, No. 8, encountered rock at a depth of 26 ft., and above the rock a stratum about 18 in. thick of coarse sand and gravel. It was possible to pump water from this well with a hand pump at a rate of 35 gallons per minute (g. p. m.) This was the first well in which any material amount of water was obtained. The other wells in this area, Nos. 9 to 13 inclusive, were all driven as far as possible but failed to show satisfactory conditions. It was not possible to make as complete an investigation of the Bear Meadow area as had been planned because of warm weather occurring in the latter part of February which melted the ice and flooded the surface of meadow. Previous to this time, the ice had provided a hard surface over which the equipment could be transported. Although the results from this area were unfavorable except in the case of well No. 8, it may be desirable in the future to explore this territory more completely when the demand for a still further increase in water supply shall have developed-

Upper Ipswich River Meadows. When the high water condition stopped operations in Bear Meadow, the equipment was moved to the Ipswich River Meadows north of Grove Street and near the Wilmington line. Starting with a well on the north side of Grove Street and at the brook just west of the Wilmington line, a series of wells numbered 14 to 29, inclusive, has been driven. The results obtained from wells 16 to 28 inclusive have been very favorable. Well No. 16 was located at the Wilmington line and others were driven in succession at intervals of about 100 ft, in an easterly and northeasterly direction as shown on Fig. 3. The materials encountered are shown on Fig 4. Table 2 gives the depth and the amount of water developed by pumping tests. The average rate of pumping developed was 31.6 g. p. m. per well. This rate is not to be taken as the dependable capacity of the wells when connected for permanent pumping, as the yield will be much less during the summer and when the general water level is lowered by pumping on the combined well system. In our judgment, it appears that a supply of about 10 g. p. m. from each well may be expected.

Table 2. Summary of Pumping Tests on Wells Upper Ipswich River Meadows, Reading, Mass.

	Total	Depth	Quantity by
Well	depth	at test	power pump
No.	ft.	ft.	g. p. m.
16	61.8 to rocl	k	(no power pump test)
17	35.0	35.0	25
18	43.5	25.0	12
19	37.2	29.9	25
20	30.0	29.5	36
21	37.6	29.2	21
22	31.2	31.2	41
23	37.8	37.5)	30)
		23.7)	35)
24	37.0	36.1	35
25	41.7	41.7	40
26	40.2	40.2	30
27	40.3	40.3	48
28	38.0		(no power pump
			test) *
29	(Material uns	suitable for tes	t)
	Averag	e for eleven w	ells 31.6

<sup>\*</sup> Lower end of casing jammed by boulder. Materials encountered were favorable to a good flow of water.

The elevation of the water in the wells on April 9, 1930, was between 3 and 4 ft. above the river level. The ground water had a slight slope in the direction of the river flow, and there was also a slope towards the river from the edge of the high ground. At the time the levels were taken the water in the filter gallery was about 22 ft. below the water level in the test wells.

The quality of the water drawn during the pumping tests is shown in Table 3 giving the results of analyses made in our laboratory. It will be noted that in but two of the wells was iron found in measurable amounts, although a trace of iron was found in four others. The amount of iron may be expected to increase as the pumping rate is increased and a greater suction lift is exerted. It is advisable, therefore, in developing a well system to provide a sufficient number of wells, so that heavy rates of draft from each may be avoided. Even then it is possible that the iron content of the water may increase with use although this is not necessarily so.

TABLE 3.—ANALYSES OF WATER FROM TEST WELLS, UPPER IPSWICH RIVER MEADOWS, READING, MASS.

Test Well No.	17	17a	18	19	20	21	22	23‡	23\$	24	25	26	27
Date	3/13	3/14	3/17	3/20	3/21	3/26	3/29	3/31	4/1	4/3	4/4	4/7	4/8
Physical Examination Color (platinum standard)	33	3	ıΩ	ıv	2	8	4	8	2	8	0	0	-1
OdorCold	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot	0	0	0	sl.	0	v. sl.	0	0	0	0	0	v. sl.	0
Turbidity (silica standard)	2	2	2	3	2	-	0	0	0	0	0	2	0
						(parts	per in illion)	(llion)					
Chemical Examination Alkalinity													
Bicarbonate as CaCO <sub>3</sub>	10.5	12.0	11.0	13.0	24.5	20.5	16.8	21.5	14.7	25.8	25.2	17.8	21.8
Carbonate as CaCO <sub>3</sub>	0	0	0	2 K 10	0	0	С	0	0	0	0	0	0
Total as CaCO3	10.5	12.0	11.0	13.0	24.5	20.5	8.91	21.5	14.7	25.8	25.2	17.8	21.8
Free Carbon Dioxide as CaCO2	0	5.5*		7.0* 13.0† 13.0† 13.0†	13.0‡	13.0†	32.0‡	32.0† 19.0†	24.0†	12.0	6.5‡	13.5†	12.0‡
Hardness (soap)	12.7	11.1	6.3	20.8	44.3	71.4	28.3	26.0	30.5	25.3	27.2	19.5	20.8
Iron as Fe	0	0	tr.	0	D	tr.	tr.	tr.	0	0.5	0	0	0.65
Hydrogen-ion concentration (pH index)	6.9	6.9	6.8	6.5	7.0	6.9	6.5	7.0	6.2	6.8	6.9	9.9	8.9
Sample number	2528	2529	2538	2552	2553	2568	2585	2589	2602	2623	2625	2632	2637

§ At 23.7 feet.

‡ At 37.5 feet.

† Field test.

\* One day old.

With respect to the hardness of the water, a considerable variation was found in the analyses. An average sample would apparently be of about the same degree of hardness as the natural water found in the filter gallery, and much softer than the water pumped into the distribution system. The hardness of the present supply is due largely to the iron removal process. Evidence thus far obtained indicates that water obtained from the new area will not contain a sufficient amount of iron to require treatment, and as a result the hardness should be low as compared with that of the present supply.

The analyses show the presence of carbon dioxide in varying amounts. This together with low alkalinity is objectionable in that it makes the water somewhat corrosive and necessitates the introduction of a small amount of soda ash or lime into the water as it is pumped.

A sample of the Wilmington water was obtained at the Wilmington pumping station for comparison with that obtained from these wells. The analysis of this water is shown in Table 4 together with those of water from the filter gallery, the deep wells and the Ipswich River.

It will be noticed that the Wilmington water contains some iron and carbon dioxide and has a hardness about the same as the Reading waters.

The Ipswich River has a drainage area above the location of the test wells of about 18 square miles. The area actually tributary to the wells by the flow of the underground water is indeterminate. It may be less than the surface area, although it is not impossible that the subsurface formation is such that water may flow in this valley from limits outside of the surface drainage lines. The drainage area is not densely populated, although it contains the village of Wilmington Center. A small part of the area adjacent to the river is swampy, but it is probable that the underground waters would be affected by the organic matter in the swamps to a less extent than water at the present filter gallery or that in Bear Meadow Brook. No indication has been found of coarse grained surface soils which would allow the rapid passage of surface water to the underground strata from which the test wells drew water. For this reason, there appears to be little likelihood of pollution or color from the surface waters in Ipswich River and its tributary brooks reaching the well waters.

Development of a New Supply. The results of the test wells warrant further consideration of the proposition to develop a ground water supply in this area. The distance from the present pumping station is so great that it would be more economical to construct a small station at the well field than to run a pipe line from the wells to the present station. The new pumps may be run by electric power and can be so designed as to run without more attention than can be readily supplied from periodic visits by the force at the present station. A pipe line would be required running from the new station to the

Tarle 4.—ANALYSES OF WATER FROM IPSWICH RIVER, FILTER GALLERY, AND DEEP WELLS, READING, MASS., AND FROM WILMINGTON, MASS., WELLS

		Filter Gallery	Sallery	De	Deep Wells Near Pumping Station	Vear Pum	ping Stat	ion	W.:
	Ipswich River	South	East	No. 1	No. 2	No. 3	No. 4	No. 5	mington Wells
Date	3/28	4/2	4/2	4/2	4/2	4/2	4/2	4/2	3/25
Physical Examination Color (platinum standard)	85	85	75	22	3	7	55	40	1
Odor—Cold	sl. musty	0	0	v. sl. earthy	0	0	0	v. sl. earthy	0
Hot	dist, musty	0	0	v. sl. earthy	0	0	0	v. sl. earthy	0
Turbidity (silica standard)	2	3	2	3	0	0	00	S	0
Chemical Examination Alkalinity									
Bicarbonate as CaCO <sub>3</sub>	6.5	12.7	10.4	32.3	27.7	43.5	39.7	38.2	23.5
Carbonate as CaCO <sub>3</sub>	0	0	0	0	0	0	0	0	0
Total as CaCO <sub>3</sub>	6.5	12.7	10.4	32.3	27.7	43.5	39.7	38.2	23.5
Carbon Dioxide as CO <sub>2</sub>	ις	29.5	21	6	S	S	14	10	16.75
Hardness (soap)	11.1	25.3	29.3	27.2	8.05	34.6	44.3	55	27.3
Iron as Fe	0	2.2	2.2	6.0	0	0.5	1.8	3.8	0.2
Hydrogen-ion Concentration (pH index)	6.9	6.5	9.9	7.2	7.3	7.4	7.2	7.3	8.9
Sample number	2580	2603	2604	2609	2608	2607	2606	2605	2561

present pipe line in Franklin Street or Grove Street. It will be wise to construct a station building large enough to provide for additional or larger pumping units as time goes on. At the present time, it would be sufficient to install two pumps, each of a capacity of 250,000 g. p. d. A sufficient number of wells should be driven to provide an immediate supply of 500,000 g. p. d., the collecting main being of such a size that it can be extended at a later date to draw from additional wells. The force main should be 12 in. in diameter from the station to the present pipe system.

The Pitometer Company in its report upon the distribution system recommended that the system be reinforced by the construction of an 8-in. main in Dunbar Road and Bancroft Avenue. It appears wise to plan for a 12-in. main in place of the suggested 8-in. main when the pipe line is needed which will then give a continuous line 12 in. diameter from the new station to a point near the present standpipe. A small amount of additional piping would be required to connect this line with the existing 12-in. main in Main Street. It would be feasible to limit the first construction to laying the 12-in. main from the station to Franklin Street. Pumping from the station should be continuous through 24 hours to obviate high rates of pumping which would involve a greater friction loss or require a larger pipe and to prevent excessive draft on the wells.

In addition to the purchase of land for the station and wells and a right of way for the pipe line, some land should be purchased to protect the watershed immediately adjacent to the wells. Although water draining to the wells from the higher land might be purified by its passage through the ground, it is wise to prevent any possibility of pollution by acquiring control of certain tracts of land whenever an advantageous purchase can be made.

Operation of Station. It is proposed to install 35 wells so as to draw but a moderate flow from each, such as 10 g. p. m. and provide for a dependable capacity of 500,000 g. p. d., although much of the time it may be necessary to draw only at a rate of not over 350,000 g. p. d. The delivery of 350,000 gals. from this station would, for a considerable portion of the year, supply all that is needed without the use of the filter gallery water which is now passed through filters for removal of iron. The steam pumps at the station could pump water from the deep wells which do not require treatment and the filter gallery and the plant for removing iron would be available for use when required. Under this method of operation, the water delivered would be much softer than that now used. Although the unit pumping cost by electric motor driven pumps might be somewhat higher than that required to pump the same amount of water by steam pumps, a saving would result through the reduction in the cost of treatment

and the decreased cost of pumping due to lower friction losses which would result from the decreased rate of pumping at the old station made possible by continual pumping through the 24 hours from the new station.

During days of maximum consumption, water could be drawn from the new wells, the deep wells at the station and as needed from the filter gallery, with treatment of the water from the latter for the removal of iron. With the added supply, it should not be neccesary to draw on the river except in case of extreme emergency.

Estimates of Cost. The estimate of cost of construction of the new well system and pumping station with necessary pipe lines follows, together with an estimate of the cost of operation and maintenance. (See Table 5.) The estimated cost of the power line, transformers, etc. has been taken arbitrarily and should be corrected by careful estimate prepared by the Town lighting department.

Table 5. Estimated Cost of Well System (35 wells, dependable capacity 500,000 g. p. d.)

New wells, 23 in addition to 12 existing test wells	\$ 1,9	60.00
Well connections complete	5,3	40.00
Collecting Mains	9,0	60.00
Sand catcher	1.	50.00
Pump House and Equipment:		
2—250,000 g. p. d. triplex pumps		
2—15 h. p. electric motors		
Dry feed chemical machine		
Venturi meter and recorder	9,2	10.00
Power line, transformers, etc. (arbitrary estimate)	5,00	00.00
Force Main, 2,700 ft. 12" c. i. pipe	6,86	00.00
	\$ 37,52	20.00
Contingencies and Engineering 15%	5,63	30.00
	\$ 43,15	50.00
Land, rights of way, and legal expenses	7,50	00.00
Estimated total cost of well system	\$ 50,65	50.00
Post to True Indication the Committee of the		

Pumping Test. Indications thus far point to the probability of obtaining a supply of good water, possibly as great as one million gallons per day in the upper Ipswich River Meadows where the satisfactory test wells were located. The next step in the program would

be to make a thorough pumping test drawing water from a number of wells at the same time. There are now available eleven wells from which water has been pumped for a period of eight hours at rates of flow varying from 12 to 48 gals. per minute. Six of these wells could be connected by a suction pipe to a gasoline engine driven centrifugal pump, having a capacity such that water could be drawn from the six wells at a rate of about 60 gallons per minute (10 gallons per minute per well.) Such a pumping test should be operated continuously for at least two weeks and preferably longer, depending upon conditions, so as to determine the effect on the ground water table. Measurements would be taken through other available wells of the height of ground water, samples of the water pumped would be taken every two or three days for analysis and measurements of the rate of flow would be made by pumping the water through a suitable weir box.

To carry on such a test would require the purchase of piping, a suitable gasoline engine driven centrifugal pump, and miscellaneous supplies and the erection of a temporary shed to house the equipment and provide shelter for the operators. It would be necessary to have a man in attendance 24 hours per day.

By this means it should be possible to forecast with some degree of accuracy the extent to which wells in this area can be depended upon for a given quantity of water, and the extent to which the quality of the water may change with continued pumping. It is probable that the State Department of Health would require that such a test be made before it would give approval to the installation of a well system in this area. It would be unwise to go forward with an expenditure of the amount required without making such a test. While it cannot be positively asserted that conditions over a period of years will follow the indications of the pumping test, the general experience has been that the results of such a test furnish a safe guide.

The most satisfactory way to handle such a test would be for the Town to purchase the necessary equipment and to operate the test with men working for and under the direction of the Water Department. Measurements of flow, measurements of height of ground water level, and analyses of the water could be made by us periodically throughout the test. If electric current were more readily available, an electric motor driven pump would be more satisfactory because of there being less likelihood of interruption to the test. With a suitable gasoline engine driven centrifugal pump, however, it should be possible to operate during the test without serious interruption.

The estimated cost of the necessary equipment and shelter is given in Table 6.

## Table 6. Estimated Cost of Equipment for Pumping Test of Wells in Upper Ipswich River Meadows.

The state of the s	
Well connections to suction main, including lead goose necks, fittings and valves	\$140.00
Suction main — 300 ft. — 3" black steel pipe.	
550 ft. — 4" black steel pipe	580.00
Pump — 105 g. p. m. capacity centrifugal pump with gaso-	
line engine on skids	450.00
Weir box and baffles	50.00
Piping and valves at pump	50.00
Wood and tar paper shelter	75.00
Miscellaneous tools, etc	25.00
	\$1,370.00
Contingencies, engineering, etc	280.00
T-4:4-1	\$1 CFO 00
Estimated total cost	\$1,650.00

The test should be made after the river level has lowered and when the season is drier so that ground water conditions in general will be less favorable than at present.

Respectfully submitted,

METCALF & EDDY,

By Frank A. Marston.

### APPENDIX A

# Record of Test Wells, December, 1929—April, 1930 Area West of Filter Gallery

Attention was first given to this area because if an available supply was found here the water drawn from the new wells would be delivered to the present pumping station. Although test wells have been driven in this area in the past, it was thought wise to make a new test, driving the wells to a greater depth than that reached previously in order to penetrate possible water-bearing material not discovered before. Four wells were driven in this area between December 13, 1929, and January 10, 1930. All the wells were located within land belonging to the Town and about opposite the Perry Farm.

Well No. 1 was driven on the edge of the hard ground through a fine sand reaching rock at a depth of about 20 ft.

Well No. 2 was located about 75 ft. northerly from the first well and was driven through fine sand to a depth of about 25 ft. before reaching rock.

Well No. 3 was located at a distance of about 90 ft. from the previous well and within the meadow area. This was carried to a depth of nearly 51 ft. Very difficult driving was experienced but the work was continued as long as there was any possibility of going deeper. For the first 20 ft. fine sand was encountered. Below this depth clay and then clay mixed with sand and gravel was encountered. The well did not reach rock, as it was impossible to drive the well below the depth stated.

Well No. 4 was located 115 feet from the previous well in the direction of the river. It was driven to a total depth of a little over 52 ft., where rock was encountered. Clay was found in this well mixed with other materials.

In none of these four wells was there found any material favorable to a water supply. It was thought that it was unwise to go to further expense in exploring this area and the well equipment was therefore moved to the valley of Bear Meadow Brook.

### Bear Meadow District

Bear Meadow Brook has a drainage area of about 4.6 sq. mi. nearly

all of which is practically free from population. This area is too far from the present pumping station to permit connecting wells driven within it to the present pumps. If, however, favorable conditions were found within or near the center of the meadows, a local station might be built from which water would be pumped to the system through a main much shorter than that now used in pumping from the existing station. Work in this area was commenced on January 11 and continued with some interruptions to February 21, during which period nine wells were driven.

Well No. 5 was located about 400 ft. east of Main Street in the Ipswich River Meadows near the mouth of Bear Brook. Rock, or a large boulder, was encountered in this well at a depth of about 23 ft.

Well No. 6 was located at about one-quarter of a mile south of Ipswich River and about 700 ft. east of Main Street. This test was carried to a depth of about 89 ft. where rock was encountered. The material penetrated was principally fine sand. A pumping test with a hand pump failed to show the presence of available water.

Well No. 7 was located at a distance of about one-quarter of a mile south of the river and the same distance from Main Street. After passing through fine sand with which clay was sometimes mixed, a stratum of coarser sand was found at a depth of nearly 94 ft. The material below the coarser sand seemed to be coarse gravel and stones. It was possible to pump a small quantity of water, about 7 or 8 gals. per minute, for a short time, but the entrance of fine sand to the well sealed it so that continuous pumping was not possible. After additional driving through the coarse material at the bottom of this well it was possible to reach a final depth of 95 ft. When this depth was reached the water rose

to within about  $2\frac{1}{2}$  ft. of the ground surface. Another pumping test, however, failed to show as good results as the previous one.

Well No. 8 was located about 400 ft. east of Haverhill Street and 300 ft. south of the town line. Rock was encountered in this well at a depth of nearly 26 ft. and water rose to within 18 in. of the ground surface. A test with a hand pump was successful in pumping about 35 gals. per minute. This was the first well in which any material amount of water was found. Before a power pump test could be made the meadow was flooded and work was abandoned.

Well No. 9 located 425 ft. east of Haverhill Street was 240 ft. south of the town line, was driven to a depth of nearly 26 ft. at which rock was reached. No water was obtained on a pumping test, although some coarse sand was found in driving.

Well No. 10 was located 300 ft. east of Haverhill Street and 350 ft. south of the town line. It was about 25 ft. from Bear Meadow Brook. This well was driven to a depth of over 37 ft. and some coarse sand in the lower part of the driving was found. The water rose to within about 1 ft. of the ground surface, but a hand pump failed to obtain more than 10 gals. per minute.

Well No. 11 was located just west of Haverhill Street and 200 ft. south of the town line. This well was driven to about 40 ft. at which depth rock was encountered. In the last 2 ft. coarse sand and gravel was found. The attempt to pump water from this well was unsuccessful.

The most of the work carried on in these wells had been done during cold weather. Ice had formed, which had made it possible to move the equipment out upon the meadow to a considerable distance from the hard ground. When the last work upon well No. 11 was under way the temperature rose and the support of the ice over the meadow was lost. It was necessary, therefore, to keep near the hard ground at points accessible to the well driving rig.

Wells No. 12 and 13, both unsuccessful, were then driven, one being carried to a depth of about 16 ft. and the other to nearly 20 ft. As the rock appeared to be rather near the surface at all accessible points, it was decided to suspend operations in Bear Meadow.

The tests made in the Bear Meadow area have been rather discouraging, but the results obtained are not conclusive. In order to obtain satisfactory information concerning this area it will be necessary to make more tests at points which were not accessible when this work was carried out.

### Ipswich River Meadows

The area in which wells were driven lies on the south side of the Ipswich River and east of the Wilmington line. A series of 16 wells including two driven west of the Wilmington line was driven between

February 24 and April 12. Ipswich River at the Wilmington line has a drainage area of about 18 square miles. This drainage area includes the main portion of the town of Wilmington, but the population within it is not large.

Well No. 14 was located on the north side of Grove Street and at the brook passing this street west of the Wilmington line and flowing northerly to the Ipswich River. The well was driven for a distance of 45 ft. passing successively through fine sand, coarse sand and a sand approaching the size of fine gravel before reaching rock. When this well reached a depth of about 28 ft. a brief pumping test was made, at which about 18 gals per minute of water was pumped. When the well was finished the water rose to an elevation about 2 in. above the water level on the outside of the pipe.

Well No. 15 was located about 600 ft. north of the previous one. It was driven to a depth of 75 ft. at which point the well casing reached rock. The material encountered in this well was finer than in well No. 14. It was possible, however, to pump water from this, although a great deal of sand was pumped with the water. The pumping test on the whole was not satisfactory.

Well No. 16 was located on the Wilmington town line about 800 ft. north of Grove Street and at the edge of the Ipswich River Meadows. This well passed through a stratum of coarse sand and gravel at a depth of about 26 ft. It was then driven until it reached rock at a depth of 62 ft. Varying grades of sand were passed through, ranging from a fine sand to fine gravel. Water rose in the well to within 18 inches of the ground surface. The most favorable material was sand at the depth between 26 and 28 ft. and between 40 and 48 ft. Information gained on two subsequent wells indicates that substantial flows may be obtained from the coarser material at these depths. A pumping test was made at a depth of 26 ft., which indicated a flow of about 25 gals per minute. At the bottom of the well the presence of fine sand, clay and hardpan prevented the entrance of any material quantity of water.

Well No. 17 was located about 200 ft. east of well No. 16 and at the southerly edge of the Ipswich River Meadows. It was driven to a total depth of 35 ft. Coarse sand and gravel was found between depths of 12 and 21 ft. and also between depths of 31 and 35 ft. A very satisfactory pumping test was made on this well on March 13 using a hand pump. In a definite test with a power pump, pumping for nearly eight hours, a rate of about 25 gals. was maintained with a vacuum of only 7½ inches.

Well No. 18 was located about 100 ft. east of well No. 17. It was driven to a depth of 43.5 ft. where it encountered fine sand. As this material hindered the inflow of water, the well casing was raised to allow pumping at the most favorable point. Preliminary pumping tests

were made successively at the depths of 43, 39.5, 32.5, 31.5 and 25.0 ft. On a continuous test with a power pump the well delivered 12 gals. per minute without affecting the water level in the neighboring well. The water cleared of sand promptly when the power pump was started.

Well No. 19 was driven to a depth of 37 ft. encountering various grades of sand and small gravel. This well delivered 25 gals. per min. on the power pump test without affecting the elevation of the water in the adjacent well.

Well No. 20 was driven to a depth of 30 ft. passing through sand and gravel apparently favorable for a water supply. 45 gals. per minute were drawn from this well on the power pump test.

Well No. 21 was also driven through favorable material, the material being explored to a depth of 37.6 ft. 21 gals. per min. were developed from this well on the power test.

Well No. 22 was driven to a depth of 31 ft. This well yielded 40 gals, per min, on the test.

Well No. 23 was driven to a depth of 37½ ft. and when tested at this depth delivered 30 gals. per min. The casing was then withdrawn in order to determine the rate of flow available at a stratum of coarse sand and gravel which had been penetrated at a depth of about 23 ft. When pumping at this depth the well delivered water at a rate of 50 gals per min.

Well No. 24 was driven to a depth of 36 ft. at which a flow of 35 gals, per min. was pumped.

Well No. 25 was driven to a depth of 42 ft. and delivered water at a rate of 40 gals, per min.

Well No. 26 was driven to a depth of 40 ft. A substantial layer of course sand and gravel was found near the bottom which yielded 30 gals. per min. on the power pump test.

Well No. 27 was driven to a depth of 40 ft. and yielded 48 gals. per min.

Well No. 28 was driven to a depth of 38 ft. It encountered a stratum of coarse sand and fine gravel between the depths of 33 ft. and 37.5 ft. from which a good supply of water is to be expected. The bottom of the well became jammed during the driving so that the bottom part of the casing was sufficiently closed to prevent a satisfactory pumping test. This well was located at the west shore of Great Island at a point 400 ft. further from the river than the two more easterly wells driven.

Well No. 29 was located at the side of the roadway crossing the section of the meadows south of Great Island. The material encountered in this well was different from that found in the previous wells in this area. No water-bearing material was found. For the first 20 ft. the well penetrated peat and sand. Below the depth of 20 ft. a hard material containing gravel and clay was found. It is possible that a stratum be-

tween the depths of 14.5 and 18 ft. of coarse sand might deliver a material amount of water. No test was made at this stratum, however. The water pumped from all the other wells was obtained from a much greater depth and it is believed wise to draw water only from those depths which are sufficient to prevent easy passage of air and surface water to the well.

The locations of all the wells driven are shown on Fig. 3. Details of the material penetrated in each of the wells are shown on Fig. 4. Analyses of the water obtained are given elsewhere in the report.

October 9, 1930

Mr. William J. Lumbert, Superintendent, Board of Public Works, Reading, Massachusetts.

Dear Mr. Lumbert:

In our report of April 21, 1930, we gave the results obtained in driving test wells and indicated that the area along the Ipswich River Meadows near the Wilmington line appeared to be well suited for the development of a ground water supply. It was thought, however, that before this area should be developed more definite information should be obtained by means of continuous pumping on a gang of several of the wells connected together, the test to be continued for a period of two weeks or more. Such a test was started on June 10 and continued until August 1, during which time a record was kept of the rate of pumping, the level of the water in the wells and other pertinent data.

Five analyses of the water pumped were made at intervals of from four to six days. As these analyses with the exception of the first one, indicated a progressive increase in the alkalinity and hardness and as iron was found in the last sample taken, it was urged on August 2 that the pumping test be continued to determine whether or not the results of the last tests accurately represented the quality of the water available. After the test had been resumed and pumping had continued for about a week another sample was taken for analysis. No iron was found in this sample and the alkalinity and hardness were slightly less than that found in the last sample taken during the previous pumping test. The following tabulation shows the principal results obtained in the chemical tests:

Date sample collected	Total alkalinity as CaCO3	Hardness (soap) p.p.m.	Iron as Fe p.p.m.
	p.p.m.		
July 12, 1930	16.4	32.5	none
July 16, 1930	13.5	22.1	none
July 22, 1930	13.8	24.1	none
July 28, 1930	14.0	26.0	none
Aug. 1, 1930	16.2	28.6	0.1
Aug. 16, 1930	14.0	28.3	none

Well Capacity. The wells connected for the pumping test were six in number and were those numbered 18, 19, 20, 22, 23 and 24 in our previous report. Observations were taken upon well No. 21, located mdway in the line of the wells tested, and upon wells 16 and 17 at one end and wells 25, 26 and 27 at the other end of the wells pumped. It was the original intention in the pumping test to limit the rate of pumping to 10 g.p.m. (gallons per minute) per well, as this is the rate at which the supply should be developed for actual use. Tests upon the individual wells at the time they were driven indicated capacities much in excess of this rate. Experience has shown, however, that high rates of pumping may result in the development of objectionable quantities of iron. It was not found practicable to reduce the pumping rate as low as 10 g.p.m. per well. During the early part of the first test (July 13-16, inclusive) the rate pumped was 180 g.p.m., or 30 g.p.m. per well, with a vacuum of 15 or 16 in. Later the rate of pumping was cut to 85 g.p.m., or 14 g.p.m. per well, with a vacuum of but 6 in. This rate was continued from July 17 to 30, inclusive. During the second test the wells were pumped at a rate of 150 g.p.m., or 25 g.p.m. per well, with a vacuum of 10 in.

While the pumping was in progress a record was kept of the elevation of the water in the adjacent wells with the results shown in the following tabulation:

Effect of Pumping on Ground Water Level
(Elevations of Water Surface in Feet)

Well No.	No. 16	No. 17	No. 21	No. 25	No. 26	No. 27
Apr. 8, 1930	178.76	178.13	177.85	177.60	177.75	177.24
July 12, 1930	177.68	177.04	. 176.70	176.05	176.15	175.54
July 31, 1930	178.03	177.04	176.9	176.0	176.1	175.44
Aug. 13, 1930	178.08	176.89	176.60	176.15	176.1	175.44
Aug. 19, 1930	177.93	176.94	176.55	176.0	176.05	175.39
Aug. 20, 1930	177.93	177.11	176.72	176.12	176.13	175.46

The elevations between July 12 and August 19 were made while pumping was in progress. It will be noticed that there was a drop of about one foot in the water in wells 16 and 17 between April 8 and July 12, and a drop of about 1½ ft. in wells 25, 26 and 27 between the same dates. This change was undoubtedly due principally to the normal lowering of the ground water from the spring level to the summer level. The record shows but a slight rise in the water level in the 25-hour period succeeding the second test. This is a favorable indication, for had the supply of ground water been small, there would have been a marked drop in the level as pumping was continued and a rise after the pumping stopped.

The records of rainfall at the pumping station for the periods within which the pumping tests were made indicate that ground water conditions were not far from normal. In the latter half of May the total rainfall was 1.64 in. as compared with an average rainfall for this period, years 1901 to 1928, of 1.5 in. The rainfall for the month of June was 2.19 in., which is 60% of the average for the 29-year period, which was 3.67 in. The rainfall during July was 4.07 in., which is 15% above the average for this month of 3.51 in. The rainfall for the first fifteen days in August was 2.09 in., which is 20% above the average for this period.

The pumping tests indicate that the area investigated by test wells is capable of producing a sufficient quantity of water, at least one million gallons per day, to justify the development of the supply by the Town. The analyses indicate a water much superior to that obtained from the present filter gallery. It is possible that as time goes on, larger quantities of iron may be found in the water but this is not indicated by the tests. Pumping wells at too high a rate will be likely to cause a deterioration in quality of the water. We are of the opinion that the Town may wisely proceed upon the development of this well area by the driving of additional permanent wells and the construction of a small pumping station from which the water can be delivered to the distribution system in Franklin or Grove Streets. This station may be designed to run in conjunction with the present station, attendance being provided as required by the present force. The presence of an excess quantity of carbonic acid in the water will necessitate the introduction of soda ash or lime to the water as pumped. Equipment for this purpose will not require great expense and the water may be treated with little difficulty. ing a firm 9 attention of the solid tro-

In view of all the data obtained in the well driving and in the subsequent tests we recommend that the Town proceed as soon as practicable with the development of the new supply, which may be used

to some extent to replace the present supply, thereby reducing the annual expense for the removal of iron at the old plant.

Respectfully submitted,

METCALF & EDDY,
By Frank A. Marston.

December 30th, 1930.

Board of Public Works, Reading, Mass. Gentlemen:

In accordance with your request of November 1, we have made a careful study for providing an additional water supply for the Town of Reading from driven wells located near the Wilmington town line on the south side of the Ipswich River in the so-called "Hundred Acre Meadow." The character of the underlying soil in the area was investigated during the past summer by driving twelve 21/2" test wells near the edge of the meadow covering a distance of one-third mile easterly from the town line. The wells encountered layers of sand with a good water-bearing strata, except for the two westerly wells, at depths varying from 30 to 42 feet. Nine of these wells were connected with a temporary electric motor driven triplex pump and a pumping test was run for several weeks to determine the character of the water drawn from the ground, and to estimate the probable yield of the water-bearing area. The quality of the water was found to be excellent although rather high in carbon dioxide and consequently quite corrosive. The yield cannot be definitely predicted, but is undoubtedly sufficient to warrant the development of this additional ground water supply.

Subsequent to the pumping test and the approval of the source by the department of public health, a temporary force main was laid to connect with the 8" water pipe on Franklin Street, and about 4.5 million gallons of water was delivered directly into the distribution system at a rate of 125 gals. per min. or 180,000 gals per day.

We have been materially aided in our studies by the above tests and by a property plan of the meadow recently drawn by Davis & Abbott. This plan has been supplemented by our own surveys for the purpose of this report. We have also been furnished with essential information by your Board and by Mr. Lumbert.

### In General

It can be definitely stated that the area considered will yield a considerable quantity of ground water. There is no certainty that the entire supply for the town, now and in the future, can be drawn from this source. The quality of the water, as evidenced by the pumping test, was satisfactory. However, there is no surety that iron will not increase

to the point of requiring its removal after continuous exhaustive pumping for several years as the result of the lowering of the ground water level and an increasing draft from the direction of the river.

One of the controlling factors in the problem is the comparatively small size of the water pipe on Franklin Street into which the ground water supply would be delivered. The practical limit to the rate of pumping, because of excessive friction at higher flows, is 525 gals. per min. or 756,000 gals. in 24 hours. For a reasonable pumping period of 16 hours per day 504,000 gals. of water would be supplied. On several days during the year 1930, the consumption exceeded 600,000 gals., and the maxmum daily pumpage was 846,774 gals. during a forest fire in May.

To provide a suitable outlet for the entire consumption will soon require a new 12" main to connect the end of the proposed 12" force main at Franklin Street with the center of the town—a distance of about 10,000 ft.—and at a cost of \$30,000.

For the above reasons and because it does not seem best to incur an expense of \$30,000 until the proposed supply has been found adequate, it is assumed that the driven wells will be developed for a capacity of 525 gals. per min. with the pumping station building, suction mains and force main of ample size for an ultimate capacity of 1,000,000 gals. in a 16 hour day, or 1,050 gals. per min. The mumping equipment, while delivering at a present rate of 525 gals. per min. can be increased to 1,050 gals. per min. by substituting new impellers in the pumps at a slight cost.

It is not proposed to reduce the carbon dioxide content of the ground water for the present. If its corrosive effect on the distribution system is serious there are several methods of treatment that could be installed without undue expense.

### Population and Water Consumption

The following table gives the population, total yearly, average daily, and daily per capita consumption every five years for the period 1895 to 1930, inclusive. The future population and consumption are estimated to the year 1960. It is assumed that the population will increase in a slightly greater ratio during the next ten-year period, than in the past, as we believe that the Town of Reading is well within the area flear Boston that will be developed for residences. If it is found that there is an abundance of ground water in the vicinity, additional driven wells can be provided from time to time as necessary to meet the increased consumption. Even if the quantity of water available is limited, the proposed ground water supply will provide a valuable and sufficient addition to the present source for many years.

## Water Consumption

			Ga	ls. per capita
Year	Population	Gals. per year	Gals. per day	per day
1895	4,717	72,375,248	198,000	42.0
1900	4,969	54,250,465	149,000	29.9
1905	5,682	51,904,135	142,000	25.0
1910	5,818	74,820,836	205,000	35.2
1915	6,805	81,877,229	224,000	32.9
1920	7,439	105,035,230	288,000	38.7
1925	8,693	120,112,169	329,000	37.9
1930	9,500	147,000,000	402,000	42.3
1935	10,700	171,500,000	470,000	44.0
1940	12,000	202,000,000	553,000	46.2
1945	13,400	237,000,000	650,000	48.4
1950	14,900	275,000,000	753,000	50.6
1955	16,500	318,000,000	872,000	52.8
1960	18,200	365,000,000	1,000,000 .	55.0

## Pumping Heads

The following table gives the pumping heads at various rates of pumping with the present distribution piping and with a new 12" main from Franklin Street to the center of the town.

The static pumping head assumes a full standpipe and the ground water at the wells lowered 12 ft.

Static			Total pump	oing head
gals. per min.	(feet)	(feet)	Present piping	New 12" main
Rate of pumping	pumping head	Pipe friction	(fee	t)
200	227	13	240	232
300	227	26	253	235
400	227	45	272	240
500	227	67	294	246
600	227	92	319	253
700	227	120	347	261
800	227	151	378	270
900	227	186	413	280
1000	227	225	452	291
1100	227	<b>2</b> 69	496	304
*Estimated	l.			

# Driven Wells

To yield 525 g.p.m. without lowering the ground water level below a reasonable limit, thirty-five  $2\frac{1}{2}$  driven wells should be provided. There are now ten wells already completed that can be utilized, requiring only a thorough cleaning. The present wells and the additional 25 wells are shown on the accompanying drawing. The distance apart of the wells is 50 ft. or more, and for the most part on alternate sides of the suction mains.

Additional driven wells for future extensions are indicated in dotted lines running northwest into the meadow and southeast into an extensive low area. The exact location of these future extensions would be determined as the work progressed when they were installed. The location of the proposed thirty-five wells is probably sufficiently fixed by the ten wells already completed. Each individual well would be connected to the cast iron suction mains leading to the pumping station by means of a special 2½" Wye branch, gate valve, lead goose neck and wrought iron piping.

The average depth of the additional twenty-five wells is assumed at 40 ft. as compared with an average of 37.1 ft. for the present ten wells. The suction main from the pumping station to the well field is 16" in diameter. Each of the branch suction mains begins with a 12" pipe and reduces to 8", thus allowing an extension of several wells at the ends.

The suction mains allow a total capacity without excessive friction of at least 2 Mg, in 24 hours.

# **Pumping Station**

The proposed pumping station is located at the westerly end of a gravel knoll near the edge of the meadow and quite central with respect to the well field. The pumping station building is 30 ft. x 30 ft. outside dimensions. Below the finished grade the structure would be built of water-tight concrete. The floor on which the pumps are located is at elevation 87, or 5 ft. below the present ground water level. This lowering of the pumps to reduce the suction lift is essential for a driven well water supply. The building above the finished grade would be constructed of brickwork and the roof of slate so that the structure would be fireproof.

The pumping station is ample in size to contain the proposed duplicate electric motor driven centrifugal pumping units and appurtenances, each capable of delivering 1 Mg. of water in a 16-hour day. Space is also available for an addition pumping unit either electric motor or gasoline engine driven, if its installation is found advisable at a later date.

The proposed pumping equipment consists of the following:

- (1) A combined sand and air chamber 8 ft. in diameter by 12 ft. in height with a 16" inlet, two 12" outlets to connect with the proposed pumps, and one 12" additional outlet for a possible future pump.
- (2) Two horizontal centrifugal pumps, direct-connected to 125 H. P. induction motors with impellers designed for 525 g.p.m. against a total pumping head of 300 ft. The installation of a 12" main on Grove and Lowell Streets would so reduce the pumping head that the capacity of these pumps with the same impellers would be increased 50% more or less, and consequently new impellers would not be required for several years. The cost of installing new impellers for 2-stage pumps would be \$600. Each pump could then deliver at least 1,050 g.p.m.
- (3) Two rotary vacuum pumps, direct-connected to squirrel-cage motors, capable of exhausting the air from the driven wells, suction mains, air chamber and centrifugal pumps within a few minutes. The vacuum pumps would operate automatically, holding the water in the sand chamber about 4 ft. above the center of the pumps to keep the pumps continuously primed.
- (4) Electric switchboard, starting equipment for the motors, electric meters, switches and other control apparatus.
- (5) Electric lights, heat, office partition and miscellaneous equipment. We have considered the installation of a third centrifugal pump direct-connected to a gasoline engine at a total cost of \$7,500 and also of providing a gasoline engine auxiliary for one of the proposed motor-driven pumps at an additional cost of \$5,500. On account of the dependability of the municipal electric power, the considerable storage of water in your two standpipes, and the availability of your present supplying works, this considerable expense does not seem to be warranted, at least for the present.

#### Force Main

The discharge main from the pumps to Franklin Street, 4,200 ft. in length, is 12" in diameter. We have considered the advantages of using a 16" pipe but find that the saving even at a pumping rate of 1,050 g.p.m. is only 14 ft. in pumping head and does not warrant the additional installation cost of \$5,000.

# Operation of New Supply

The method of operating the new supply has been carefully considered. For the present we believe semi-automatic control will be

preferable. During the winter months the entire supply could ordinarily be furnished from the driven wells and within a 16-hour working day. In the months of greatest consumption, there will be several days each month when the present pumping station must be operated to supply the consumption. We believe that both stations can be run simultaneously with the present operators. It would be possible to provide remote control at the present pumping station to start and stop the pumping equipment at the new supply, but the cost would be about \$2,500 and it would seem safer to have the operator start the new station each morning, after which he could either remain there or return to the present station, depending upon the consumption requirements. The new station would be stopped by hand when the standpipes were filled. Until the equipment had been thoroughly proven, it would be advisable for an operator to remain continuously at the new station.

# Cost of Construction

We have estimated the total cost of developing the new driven well water supply system as follows:

### Driven Wells

25 Additional wells (1000 lin. ft. @ \$3.10)	\$	3,100.00	
Wells driven and abandoned	Ψ	ŕ	
(150 lin. ft. @ \$2.40)		360.00	
Suction mains and specials			
16" to 8" (1,870 lin. ft.)		7,965.00	
Connections to driven wells		4 5 5 6 6 6	
(35 @ \$45)		1,575.00	
Cleaning present ten wells		100.00	
Total for well system			\$13,100.00
Pumping Station (30 ft. x 30 ft.) (outside dimensions)			
Substructure, superstructure, pump founda-			
tions, piping connections and valves, light,			<b>#11</b> 000 00
heat, office, grading, etc			\$11,000.00
Pumping Equipment			

1 Sand and air chamber

2 525 g.p.m. electric motor driven centrifugal pumps with provision for new impellers to deliver 1 Mg. in 16 hours.

2 Electric motor driven vacuum pumps. Switchboard and electric control equipment.	
Electric wiring, gages, miscellaneous piping, etc.	
Complete and erected, ready for operation	\$10,600.00
10" Venturi meter, installed	1,000.00
12" Cast iron force main (4,200 lin. ft.)	10,300.00
Total	\$46,000.00
Engineering and contingencies (15%)	6,900.00
Total cost of installation, excluding land and	
rights-of-way	\$52,900.00

The above estimates are based on electric motor driven centrifugal pumps which represent a minimum installation cost for pumping equipment and pumping station. Electric motor driven triplex pumping units would involve an increase in construction cost of \$13,000. The average saving in electric power would be \$675 per year which does not equal the fixed charges on the additional cost.

Consideration should also be given to Diesel oil engines for the motive power instead of electric motors. Either centrifugal or triplex pumps could be operated by oil engines but the saving in fuel oil does not warrant the additional cost of the triplex pumps. For two 1,050 g.p.m. oil engine driven centrifugal pumps the cost of the pumping units, foundations, pumping station and appurtenances would be increased \$34,000.

# Cost of Electric Power for Pumping

The electric power rate proposed by the Reading Municipal Light Department under Schedule E is as follows:

First 30 hours per month of maximum K. W. demand @ 3c per K. W. H. Next 120 hours per month of maximum K. W. demand @ 2c per K. W. H. Over 150 hours per month of maximum K. W. demand @ 1.9c per K. W. H. Discount 10% if paid within 15 days.

Under this schedule the Water Department provides the necessary transformers and the current is metered at the primary voltage. The average cost for electric power with the present distribution piping would be about \$33 per Mg. of water pumped, and the average electric power rate 1.82c per K. W. H.

A new 12" main on Grove and Lowell Streets would reduce the cost to about \$24.50 per Mg. The above cost represent 1,785 and 1,300 K. W. H.'s per Mg.

The average cost for fuel oil and lubricating oil with a new 12" pipe on Grove and Lowell Streets would be \$7.50 per Mg. of water pumped as against \$24.50 for electric power. The average saving in the cost of power with Diesel oil engines for the period from 1930 to 1950, which may be considered to represent the useful life of the pumping units, would be \$3,400 per year.

The certain additional costs would be as follows:

Interest and depreciation on \$34,000 @ 8%	\$2,720.00
Increased maintenance and repairs	400.00

Total ......\$3,120.00

An uncertain additional cost is for labor because the station could not be operated semi-automatic with Diesel engines but would require the constant attendance of an operator.

In view of the uncertain saving, small at best, and the considerable increase in the appropriation necessary for developing the driven well supply using Diesel oil engines we believe that electric motor driven centrifugal pumping units represent the best economy.

# Recommendations

As a result of our study we would recommend—

- (1) That driven wells be provided for a capacity of 525 gallons per minute, the practical limit of the capacity of the present piping system.
- (2) That the pumping equipment, pumping station and force main to Franklin Street be designed for a capacity of 1,050 g.p.m.
- (3) That a new 12" main be installed from Franklin Street to the center of the Town in 1933 conditioned, however, upon the results of the operation of the driven well supply.
- (4) That the present supplying works be maintained and operated as found to be expedient and necessary.
- (5) That the Town appropriate the sum of \$55,000 for developing an additional supply of water from driven wells.

Respectfully submitted,

WESTON & SAMPSON.



# Thirty-sixth Annual Report

OF THE

# ELECTRIC LIGHT COMMISSIONERS

For the Year Ended December 31

1930

# OFFICERS OF ELECTRIC LIGHT AND POWER DEPARTMENT

# Commissioners

HENRY R. JOHNSON,	Chairman	Term	expires	1932
HERBERT G. EVANS,	Secretary	Term	expires	1933
HARRY P. BAKER		Term	expires	1931

# Manager

# ARTHUR G. SIAS

# Office

177 Main Street, Reading, Mass.

# MANAGER'S REPORT

To the Municipal Light Board:

#### Gentlemen:

I respectfully submit herewith my report of the operation of the Municipal Light Plant for the year ending December 31, 1930.

While the year just passed has been one in which business activities have shown a tendency to slacken, yet our station records show that we delivered at the switchboard about 9 per cent more current than during the previous year.

The kilowatt hours sold increased about 14.5 per cent, and kilowatt hours unaccounted for decreased from 18 per cent to 13.9 per cent. The maximum station load was 2190 K. W. as compared with 2048 in 1929.

The maximum load occurred on December 24th. The largest daily output in K. W. H. was 24881 on December 23rd.

The following table shows the kilowatt hours purchased, kilowatt hours sold for the various classes of service, kilowatt hours furnished for which no revenue was received, and the number of kilowatt hours unaccounted for.

For purposes of comparison similar data for 1929 is included in the table, with the increase or decrease in each class of service.

# K. W. HOURS PURCHASED AND SOLD

	1930	1929	Increase
			Decrease
K. W. Hours:			
Generated	none	103,985	103,985
Purchased	7,050,708	6,362,853	687,855
Totals	7,050,708	6,466,838	583,870
K. W. Hours Sold:			
Residence Lighting	2,783,528	2,444,555	338,973
Commercial Lighting	500,427	452,605	47,822
Commercial Heating	201,151	189,148	12,003
Commercial Power-Retail	1,017,313	1,334,736	317,423
Commercial Power-Wholesale	763,140	238,150	524,990
Municipal Lighting	98,495	85,790	12,705
Municipal Power	246,340	121,652	124,688
Street Lighting	391,385	371,547	19,838
Police Spot Lights	3,056	2,177	879
Sub-total	6,004,835	5,240,360	764,475
Station and Garage K. W. Hours used for Christmas	52,117	56,368	4,251
Illumination	14,264	6,622	7,642
K. W. Hours Unaccounted for	979,492	1,163,488	183,996
Totals	7,050,708	6,466,838	583,870
Per Cent Unaccounted for	13.9%	18.0%	4.1%

The kilowatt hours sold for residence use increased 13.8 per cent and showed an average use per meter of 611 kilowatt hours as compared with 544 in 1929.

For commercial lighting use there was an increase of 10.5 per cent and for commercial power 13.2 per cent. Current sold for commercial heating and refrigeration showed an increase of 6.3 per cent.

The average cost of current purchased was 1.106 cents as compared with 1.051 cents last year, the increase being due to the larger average demand in 1930.

The average production cost for the year, based on the total kilowatt hours purchased was 1.36 cents.

The average total cost of all current sold and delivered to street lights was 4.19 cents which is the lowest cost we have any record of at this plant. The average income per kilowatt hour sold and delivered to street lights was 4.44 cents.

The following table shows the average cost per kilowatt hour for each class of expense accounts, based on the number of kilowatt hours sold and delivered to street lights, in 1929 and 1930.

# Comparison of Operation Costs 1930-1929

	1930	1929
Production	1.332	1.365
Distribution	1.139	1.113
Utilization	0.169	0.171
Commercial	0.240	0.279
New Business	0.061	0.093
General and Miscellaneous	0.980	1.086
Bonds, Notes and Interest	0.265	0.329
Total Costs	4.186	4.436

This shows a reduction in costs over 1929 of a quarter of a cent per kilowatt hour or 5.6 per cent.

The income from sales of current was \$266,891.46, an increase of \$20,949.01 or about 8 per cent more than last year.

The appropriation from the tax levy for street lighting was \$12,000.00 and the cost to the Department was \$12,516.79.

A comparison of the income received this year and last year from the different classes of customers as well as the income received from each town is shown in the following table.

# Income From Sales of Current

income from Sales of Current								
	1930	1929	Increase					
	•		Decrease					
Residence Lighting	\$143,939.34	\$128,888.80	\$ 15,050.54					
Commercial Lighting	34,599.15	32,085.82	2,513.33					
Commercial Heating	6,942.82	6,370.35	572.47					
Commercial Power-Retail	. 33,944.39	41,531.70	7,587.31					
Commercial Power-Wholesale	14,086.86	5,592.25	8,494.61					
Municipal Light	1,915.72	1,808.50	107.22					
Municipal Power	5,505.26	3,023.27	2,481.99					
Street Lighting	25,957.92	26,641.76	683.84					
Totals	\$266,891.46	\$245,942.45	\$20,949.01					
Income From	Each Town							
Reading	\$163,207.91	\$152,132.51	\$ 11,075.40					
Lynnfield Center	15,275.35	13,516.86	1,758.49					
North Reading	28,914.17	27,971.65	942.52					
Wilmington	58,986.79	51,961.99	7,024.80					
Other Districts	. 507.24	359.44	147.80					
Totals	\$266,891.46	\$245,942.45	\$ 20,949.01					

The following table shows the kilowatt hours sold in each town during 1929 and 1930:

# K. W. Hours Sold in Each Town

	1930	1929	Increase
			Decrease
Reading	4,024,023	3,601,491	422,532
Lynnfield Center	238,873	208,589	30,284
North Reading	454,640	448,998	5,642
Wilmington	1,278,985	975,476	303,509
Other Districts	. 8,314	5,806	2,508
Totals	6,004,835	5,240,360	764,475

The total expenses for the year increased \$19,032.59 or about 8 per cent.

Of this amount \$11,252.46 was expended for additional current purchased, and \$6614.99 for renewal and maintenance of distribution lines

The last of the outstanding notes amounting to \$1300.00 have been paid during the year.

The amount of bonds outstanding at the beginning of the year has been reduced by \$11,500 and bonds authorized for additions and improvements to the distribution system, amounting to \$15,000 have been issued during the year. The total amount outstanding December 31, 1930 was \$69,500.00.

The inventory value of materials and supplies is \$8290.82 more than at the beginning of the year. This increase for the most part is represented by the additional quantity of wire on hand.

Current assets December 31st exceeded current liabilities by \$64,547.34, which is an increase of \$10,535.88 over the previous year.

Accounts Receivable were \$33,646.94 and Accounts Payable \$32,781.02.

Bills paid by the Treasurer in advance of collections amounted to \$13,975.81.

The increase in Profit and Loss surplus for the year was \$13,405.26.

The additions to plant accounts during the year amounted to \$38,612.67 the details of which are shown in the table elsewhere in this report. Of this amount \$10,014.88 was paid from the Special Appropriation for Construction. The balance of the additions have been taken care of from the Depreciation Fund.

We have installed 341 new services and 38 additional street lights during the year.

The following table shows the classification of customers as of December 31st.

# Classification of Customers as of December 31, 1930

	Res.	Com.	Com.	Com.	Power	Private	Totals
	Ltg.	Ltg.	Htg.	Ret'l	Wh'l's'l'e	St. Lts.	
Reading	2509	270	47	80	9	10	2934
North Reading	659	59	20	17	3	6	764
Lynnfield Center	380	27	8	9	-		424
Wilmington	1118	97	15	19	2	4	1255
Totals	4666	453	90	125	14	29	5377

Public street lights have been installed as follows:

Reading 13, North Reading 8, Wilmington 10, and Lynnfield Center 7. Three private street lights have been discontinued during the year. The number of hours which the street lights have burned during the year is as follows: Reading 3930, North Reading and Lynnfield 2148, Wilmington 2151.

The following table shows the number of each size of street lamps renewed during the year.

the jean									
	40	50	60	100	250	300	600	1000	Total
	CP	W	CP	CP	CP	W	СР	CP	
Reading			868	2	93		13	26	1003
Lynnfield Center	225								225
North Reading	422								422
Wilmington	883	44				15			942
Totals	1530	44	868	2	93	15	13	<b>2</b> 6	2592

# POWER STATION

The generating machinery at the power station has not been used during the year, all current being purchased.

The equipment is in good operating condition and can be started up at short notice.

During the year the new Edison Sub-station at Woburn has been connected with the high tension transmission lines of the New England Power Company from the Fifteen-Mile Falls development on the Connecticut River.

As our supply of electricity comes through this sub-station, we receive the benefit of additional capacity in generating equipment as well as an additional source of power supply.

Five new feeder voltage regulators have been installed at the power station on the Reading Center, Pumping Station and Wilmington primary feeder circuits, and the regulation on these circuits has been greatly improved and losses reduced.

The cost of the regulators, including installation was \$5,743.73 which was paid from the special appropriation.

# Distribution Lines

Considerably more than the usual amount of work has been done on the distribution lines this year, in renewing defective poles. The following tables show in detail the number of each size renewed as wellas the number added.

# Summary of Pole Additions and Renewals

Comparative Statement of Pole A	dditions	and Rene	wals
Additions:	1930	1929	19 <b>2</b> 8
Reading	76	80	34
North Reading	139	55	76
Lynnfield Center	44	75	27
Wilmington	118	129	111
Total Additions	377	339	248
Renewals:			
Reading	287	146	100
North Reading	89	86	38
Lynnfield Center	95	31	39
Wilmington	120	92	133
Total Renewals	591	355	310
Total Poles Handled	968	694	558

Comparative Statement of Pole Additions and Renewals By Sizes

	00	Pururi C pru			o wild iteli	011410 25	DIECO
Po	les		Addition	S		Renewals	
		1930	1929	1928	1930	1929	1928
25	ft.		3	2	. 1		
30	66	265	257	198	90	137	72
35	44	57	60	41	424	174	210
40	44	55	16	4	58	36	19
45	66	_	2	2	18	8	6
50	66	_					2
55	66		1	1		_	1
					_		-
		377	339	` 248	591	355	310

The three phase feeder lines on Chestnut Street, North Reading have been replaced with larger wire, as well as those on Lowell Street and Main Street, Lynnfield Center. The lines on Chestnut Street, Lynnfield Center have not yet been completed.

The feeder lines on Lowell and Main Streets, Wilmington have been renewed with larger wire as far as Church Street. Work is now progressing on the renewal of the lines on Main Street and Woburn Street, Wilmington, with wire of larger capacity. The feeders between the Power Station and Reading Square have been increased in size, thereby enabling us to maintain better voltage regulation.

In all, approximately 50 miles of wire has been added to the distribution system during the year. The amount expended from the special appropriation for this work was \$4,271.15, the balance being used from the Depreciation Fund.

The number of transformers in use December 31st was 527, an increase of 27 over the previous year.

# STREET LIGHTING

We have continued the improvement of the street lighting system by the installation of 20 General Electric Novalux enclosed units with 400 candle power lamps on South Main Street from the railroad crossing to the Stoneham line. These replaced the old type brackets with flat shades and bare lamps.

We have also replaced the old style fixtures on Haven Street from Sanborn Street to Gould Street with Novalux units and 1000 candle power lamps.

Future plans contemplate renewing with the new type fixtures, the old style brackets on Salem and Woburn Streets.

We plan to do similar work on North Main Street when the street is rebuilt by the State.

# **METERS**

We have added to the distribution system during the year 172 meters. The value of new meters purchased during the year was about \$1000. less than last year, due to the change to single meters in residences, which released a large number for use in connection with new services. 1076 meters have been tested and calibrated, either in customers' premises or in the meter room.

840 inspections of polyphase power meters have been made. The periodic inspection of meters in customers' premises, which during last year was done by the State Engineering and Testing Bureau, has been carried on this year by Mr. H. L. Gianascol, a graduate of the meter department of the General Electric Company. All meters are now tested, repaired and calibrated by our own department.

# CHRISTMAS DECORATIONS

The decorative lighting on the streets, parks and public buildings was again installed for the holiday season. In place of the lighted trees on the poles, lights were arranged in the shrubbery on the Common and Ernest Leach Park. That this change met with approval, was evidenced by the many favorable comments which we received.

4725 lamps were lighted for two weeks, using 13517 kilowatt hours. The expense to the Department for this work, including current, labor and lamp renewals was approximately \$1500.

# MASSACHUSETTS BAY TERCENTENARY

The Department co-operated with the local Tercentenary Committees in Reading and Wilmington in furnishing electrical service in connection with the celebrations held in each town.

# LAMP AND APPLIANCE DEPARTMENT

Sales of lamps and appliances amounted to \$40,440.59 which was about 12 per cent less than last year. The estimated annual revenue from the appliances sold is \$6934.

# RELIEF OF UNEMPLOYMENT

The Department has co-operated as much as possible during the year with the Selectmen and Board of Public Welfare in providing work for the unemployed. Ten persons have been given employment during the year and their wages amounted to \$3,972.73.

# **FUTURE IMPROVEMENTS**

As the time is probably near at hand when the street car service in Reading will be replaced with bus service, and car tracks, trolley wires and feeders removed, it seems opportune to consider the advisability of placing our wires underground, at least through the central part of the town, on Main and Haven Streets.

Estimates have been prepared to cover the section of Main Street Letween Green Street and a point beyond the Old South Church, including the installation of Ornamental Street Lighting standards.

The cost of this work is estimated at \$40,000, which includes the removal of all poles and wires between these two points.

If this work is extended through Haven Street from Main to High Streets the additional cost will be about \$12,000.

The extension of the underground ducts and cables from Green Street to the Power Station would cost about \$38,000 outside the station.

A new switchboard at the station will be required in the near future and this work should be done in conjunction with the underground service connections. The proper arrangement of underground cables, feeder regulators and switchboard cannot be made inside the present building. It seems best when this work is done to build a switchboard room at the north end of the station, large enough for the new board, feeder regulators and underground cable connections. This room would be 45x20 ft. with basement and would cost about \$8,000. A 10-panel switchboard of the modern type would cost about \$25,000.

I recommend that articles be inserted in the warrant for the annual town meeting covering the above improvements so that the voters may have an opportunity to decide whether or not any of this work should be done this coming year.

The auditor's report which follows gives in detail the financial information pertaining to the operation of the plant, including Balance Sheet, Statement of Operations, Profit and Loss Account, also detail of Income and Expense accounts and Schedule of Bonds and Notes.

I submit herewith my estimate of the expenses and income of the plant for the year ending December 31, 1931, as required by law.

# Estimate For 1931 Expenses

	4100 110 00
For Operation, Maintenance and Repairs	\$199,418.00
For Interest on Bonds	2,975.00
For Depreciation at 4% on Cost of Plant	30,609.33
For Bond Payments	13,000.00
For Taxes	2,000.00
For Uncollectible Operating Revenue	2,000.00
Total Expenses	\$250,002.33
Income	
From Sales to Private Consumers	\$255,808.56
From Sundry Sales	500.00
From Interest on Consumers Deposits	100.00
From Tax Levy:	
For Municipal Departments \$ 7,810.00	
For Street Lights	21,310.00
Total Income	\$277,718.56
Data from the records of the Plant is given in the follo	wing pages
of this report.	-

# Respectfully submitted,

ARTHUR G. SIAS, Manager.

The reports of the Manager and Auditor as herewith submitted are hereby approved.

HENRY R. JOHNSON HERBERT G. EVANS HARRY P. BAKER Municipal Light Board.

# PLANT INVESTMENT ACCOUNTS—ELECTRIC

# TOTAL COST OF PLANT

# As of December 31, 1930

Cost of Land       \$ 2,575.80         Cost of Structures       44,252.41	
The second secon	-
Generating Plant—Steam:	
Cost of Boiler Plant Equipment\$ 69,696.7 Cost of Prime Movers and Auxiliaries 29,013.3 Cost of Turbo Generator Units	3
Transmission, Distribution and Storage:	
Cost of Poles, Fixt. & Overhead Cond \$350,346.91 Cost of Consumers Meters	5 ) 3
	•
Utilization Equipment:	
Cost of Street Lighting Equipment \$ 26,423.40 Cost of Consumers Premises Equipment . 428.99	
Total Cost of Electric Plant as shown by books	\$767,809.12
Cash Balances At Close of Year	
Petty Cash Fund (Due Treasurer)	\$ 250.00
Depreciation Fund Account	
Debits	
Balance of account at beginning of year	none \$ 29,064.82
Total	\$ 29,064.82
Credits	
Amount expended for construction purposes	\$ 27,613.42
Balance on hand at close of year	\$ 1,451.40

# Materials and Supplies

waterials and Supplies	
Materials and Supplies	\$ 34,342.10
Electric Appliances	23,296.85
Coal	
Oil	41.68
Total	\$ 58,322.30
Construction Fund	
Debits	
Balance at beginning of year	none
Transferred from Depreciation Fund	\$ 27,613.42
Construction sold during year	1,603.15
Total	\$ 29,216.57
Credits	
Amount expended for Additions and Extensions \$ 29,2	216.57
Balance at close of year	none
Construction Fund—Special	
	200.00
	000.00 124.00 \$ 15,124.00
Expenditures:	124.00 \$ 15,124.00
*	743.73
	998.07
	273.08 \$ 10,014.88
Balance on hand December 31, 1930	\$ 5,109.12
Operation Fund	
Debits	
Balance at beginning of year \$.19,2	230.92
Received from Sale of Electricity 254.8	391.46
	00.00
	918.61
. Total Debits	\$300,579.15
Credits	
Expenditures for Operating Accounts \$243,0	041.26
	500.00
	300.00
Interest Paid	148.66

Amount Transferred to Depreciation Fund 27,613.42	
Total Credits	\$286,603.34 13,975.81
	\$300,579.15
Data From Records of Plant	
Kilowatt Hours Manufactured	_
Kilowatt Hours Purchased	. 7,050,708
Kilowatt Hours for Reading Street Lights	. 298,730
Kilowatt Hours Sold	5,706,105
Kilowatt Hours Used at Station and Office	
Kilowatt Hours Used for Christmas Decorations	14,264
Kilowatt Hours Unaccounted for	979,492
Coal Used—Net Tons	
Average Cost of Coal per Net Ton	\$5.75
Poles Added	
Poles Renewed	
Feet of Wire Added	
New Services Installed	
New Street Lamps Installed	. 30
Connected Load December 31, 1930	
Number of Customers	5380
Horse Power in Motors	. 1592
Number of Public Street Lights	
Number of Private Street Lights	. 29
Reading	
Number of Customers December 31, 1930	2,918
Number of 40 candle power public street lights	2,710
Number of 60 candle power public street lights	546
Number of 100 candle power public street lights	15
Number of 250 candle power public street lights	73
Number of 400 candle power public street lights	30
Number of 600 candle power public street lights	1
Number of 1000 candle power public street lights	56
Number of 60 candle power private street lights	15
Number of 100 candle power private street lights	3
Number of 250 candle power private street lights	1
Horse Power in Motors	1,342
Income for vear	\$163,715.15

Lynnfield Center	
Number of Customers December 31, 1930	424
Number of 40 candle power public street lights	
Number of 40 candle power private street lights	
Horse power in motors	
Income for year	
North Reading	,,
Number of Customers December 31, 1930	
Number of 40 candle power public street lights	306
Number of 40 candle power private street lights	6
Horse power in motors	162
Income for year	\$ 23,914.17
Wilmington	
Number of Customers December 31, 1930	1,251
Number of 40 candle power public street lights	505
Number of 600 candle power public street lights	
Number of 50 watt public street lights	13
Number of 300 watt public street lights	8
Number of 40 candle power private street lights	4
Horse power in motors	63
Income for year	\$ 58,986.79
Cost of Distribution System in Outside Tow	'ns
Cost of Distribution System in Outside Tow North Reading	'ns
North Reading	ns.
North Reading  Fotal Investment December 31, 1930:	
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond \$ 63,994	4.14
North Reading  Cotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond \$ 63,990 Consumers Meters	4.14 0.11
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15 Line Transformers 7,54	4.14 0.11 7.96
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89.	4.14 0.11 7.96
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center	4.14 0.11 7.96
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930:	4.14 0.11 7.96 7.92 \$ 83,590.13
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07.	4.14 0.11 7.96 7.92 \$ 83,590.13
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24 3.96
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59. Street Lighting Equipment 1,79	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59. Street Lighting Equipment 1,79. Wilmington	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24 3.96
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59. Street Lighting Equipment 1,79. Wilmington  Total Investment December 31, 1930:	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24 3.96 0.56 \$ 37,137.74
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59. Street Lighting Equipment 1,79. Wilmington  Total Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$106,05	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24 3.96 0.56 \$ 37,137.74
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59. Street Lighting Equipment 1,79. Wilmington  Total Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$106,05. Consumers' Meters 13,97	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24 3.96 0.56 \$ 37,137.74 8.10 5.34
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59. Street Lighting Equipment 1,79. Wilmington  Total Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$106,05. Consumers' Meters 13,97. Line Transformers 8,97.	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24 3.96 0.56 \$ 37,137.74 8.10 5.34 1.17
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59. Street Lighting Equipment 1,79. Wilmington  Total Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$106,05. Consumers' Meters 13,97. Line Transformers 8,97. Street Lighting Equipment 4,222.	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24 3.96 0.56 \$ 37,137.74 8.10 5.34 1.17 4.83 \$133,229.44
North Reading  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$63,99. Consumers Meters 9,15. Line Transformers 7,54. Street Lighting Equipment 2,89. Lynnfield Center  Fotal Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$28,07. Consumers' Meters 4,67. Line Transformers 2,59. Street Lighting Equipment 1,79. Wilmington  Total Investment December 31, 1930: Poles, Fixtures and Overhead Cond. \$106,05. Consumers' Meters 13,97. Line Transformers 8,97.	4.14 0.11 7.96 7.92 \$ 83,590.13 8.98 4.24 3.96 0.56 \$ 37,137.74 8.10 5.34 1.17

	Total Cost of Plant December 31	\$135,992.62	144,714.06	173,091.96	202,518.81	233,509.58	254,349.09	269,898.27	285.428.29	348,871.08	389,564.73	421,048.20	449,540.12	477,852.76	505,983.28	530,147.28	568,524.09	615,915.35	651,367.92	682,234.74	729,196.45	767,809.12
	Bond and Note Payments	000000	4,500.00	7,200.00	6,800.00	9,000.00	9,500.00	10,800.00	11,300.00	14,800.00	14,800.00	18,300.00	19,300.00	16,800.00	15,800.00	15,800.00	13,800.00	12,800.00	15,800.00	14,800.00	13,800.00	12,800.00
	Depreciation	\$3,556.00	4,079.78	4,143.80	4,788.80	6,051.08	6,972.28	7,597.47	8,096.95	8,529.85	10,419.76		16,767.55	17,959.59	19,011.08	20,136.30		22,637.93	24,533.58	25,951.68	27,186.35	29,064.82
	nterest	\$2,535.75	2,767.00	3,018.21	3,515.40	4,453.33	4,640.42	4.704.99	5,070.43	6,882.24	7,416.21	7,850.70	7,423.10	6,807.64	6,437.28	6,174.57	5,482.46	5,100.14	4,763.62	4,062.79	3,440.81	3,148.66
	Miscellaneous Expense	2	5,753.84	5,605.18	10,214.88	8,697.05	7,730.32	8,316.39	11,577.08	11,311.54	13,874.46	17,142.48	16,594.65	38,489.58	15,607.11	30,817.91	34,188.95	31,167.10	34,551.95	44,676.08	49,303.18	48,720.62
ADDE A	Distribution noitszition Sznegzz Sznegzz		6,353.77	5,605.41	10,705.42	7,784.82	10,329.83	13,986.22	14,557.81	13,572.51	13,864.14	17,085.95	24,453.15	22,473.04	20,247.54	25,898.28	28,272.55	29,349.46	50,863.76	63,361.23	67,309.66	77,764.90
TUTT	Production Expense	\$13,228.57	13,066.25	17,546.87	20,054.99	19,014.03	18,292.78	22,261.19	30,460.16	41,006.13	45,006.98	56,187.74	52,738.98	55,137.36	62,619.57	61,286.63	73,140.10	88,478.94	67,661.31	67,410.22	71,418.27	79,991.86
	Appropriations from Tax Levy for forstruction		1,000.00	5,500.00	5,076.19	4,132.07	none															
	Appropriations from Tax Levy for Street Lights	00	5,800.00	5,000.00	6,000.00	4,500.00	10,500.00	5,000.00	8,750.00	11,000.00	14,450.00	11,000.00	17,500.00	15,300.00	14,800.00	12,000.00	11,000.00	12,000.00	13,500.00	13,500.00	13,000.00	12,000.00
	Income from Other Sources	\$ 604.88	410.77	599.07	671.87	791.14	640.25	911.69	2,422.92	1,537.86	1,100.11	1,094.66	219.20	451.50	464.31	1,373.72	1,112.19	467.05	599.88	585.27	861.14	1,995.34
	Income from Sale of Electricity	\$25,668.87	31,317.40	37,171.93	44,664.70	49,799.75	51,603.32	61,900.01	67,593.64	78,096.09	100,844.10	126,152.11	135,886.69	155,505.14	166,783.32	177,889.16	185,492.72	201.956.03	221,343.72	228,414.97	245,942.45	266,891.46
	Year	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930

1		19	DOW.	ogoj/	Hor	116 1-2	215	242 1-4	272	313 7-10	381	441	492	672	886	812.5	1,120.5	1,197.5	1,367.5	1,281.8	1,395.2	1,429	630.9	1,723.5	,354.25	,592
		sti	r of																							
		J	r oi	rom pe:	sn)	738	888	1,078	1,263	1,390	1,599	1,805	1,964	2,083	2,333	2,617	2,939	3,234	3,666	4,058	4,472	4,786	5,017	5,085	5,221	5,380
	lo	uo]	9 C E 19	l B	avA RoD	3.461	3.341	3.741	3.941	3.666	3.578	3.934	6.348	7.875	7.517	10,352	10,171	9.00	8.94	6.503	6,358	6,488	6,609	6,354	6.783	5.75
		ĵ	pəs su	oT U I	Net	1,748.3	1,807.6	2,247.8	2,680	2,496.4	2,298.2	2,741.7	3,086.7	3,348.8	3,640	3,615	3,308.4	3,791.5	4,577.7	3,379.5	6,317.7	5,740.2	947	204	378	150
	Tol	pə	jun H	W.	K. '	154,367	144,236	182,141	174,672	204,894	265,173	295,216	297,710	206,032	336,791	418,574	396,296	565,633	470,225	206,967	578,245	732,685	806,935	914,041	1,163,488	985,450
TABLE B	ts b m'A m'A	c <sub>K</sub>	H. Sto lian	M.	 Star &	16,269	15,403	13,307	15,283	15,283	10,403	13,916	12,464	10,573	189,067	257,999	146,206	276,477	342,189	392,231	383,152	366,352	58,249	25,625	56,368	52,117
	stri;	o;	H. ed t	W. iver	Ees Del	227,100	244,055	242,033	255,744	187,590	156,505	170,810	168,535	125,820	172,948	175,704	178,892	183,250	183,935	209,738	241,476	249,386	261,361	259,482	278,217	298,730
		gojq	з .н	.Ψ.	Κ.	300,861	367,317	481,801	599,893	578,709	548,607	751,735	812,507	976,121	1,358,028	1,444,960	1,471,698	1,583,716	2,046,848	2,463,602	2,848,309	3,071,944	3,676,545	3,898,620	5,240,360	5,355,542
			pəsi H	M.															3,520		25,495	819,787	4,396,397	5,097,763	6,362.853	7,050,708
			H		K. Ger	698,597	771,011	919,282	1,045,592	986,476	980,688	1,231,677	1,291,216	1,318,546	2,056,834	2,297,237	2,193,092	2,609,076	3,039,677	3,572,588	4,031,182	3,600,580	406,693	none	103,985	none
				II	χes	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930

TABLE C Production Costs Per K. W. H. Based on Total K. W. H. Delivered at Switchboard

	K. W. H.		R	epairs and other	Total
Year	Purchased	Fuel	Labor	Station Expense	Costs
1910		.0086	.0075	.0026	.0187
1911		.0078	.0069	.0021	.0168
1912		.0091	.0071	.0027	.0189
1913		.0101	.0070	.0020	.0191
1914		.0092	.0082	.0017	.0191
1915		.0085	.0087	.0013	.0185
1916		.0087	.0071	.0022	.0180
1917		.0144	.0075	.0015	.0234
1918		.0200	.0085	.0025	.0310
1919		.0133	.0066	.0019	.0218
1920		.0162	.0071	.0009	.0242
1921		.0153	.0077	.0009	.0240
1922		.0131	.0066	.0014	.0211
1923		.0134	.0057	.0014	.0205
1924		.00979	.0055	.00166	.01695
1925		.00991	.0054	.00272	.01803
1926	.0285	.01034	.0056	.00212	.0200
1927	.01116	.01205	.00246	.00390	.01743
1928	.01227	None	.00170	.00225	.01622
1929	.01051	.01444	.00141	.00150	.01349
1930	.01106	None	.00124	.00127	.0136

# TABLE D

Average Cost Pe	r K.	w. H.	As I	Jefine	d by	Chap	ter 16	4, Ge	neral	Law
	1912	1913	1914	1915	1916	1917	1918	1919	1920	
Operating Costs:	.0397	.0483	.0362	.0586	.0467	.0577	.0538	.0509	.0558	
Fixed Costs:	.0198	.0176	.0254	.0299	.0261	.0249	.0274	.0213	.0259	
Total Costs:	.0595	.0659	.0616	.0885	.0728	.0826	.0812	.0722	.0817	
•	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Operating Costs:	.0640	.0561	.0494	.0377	.0442	.0448	.0395	.0414	.0359	.0344
Fixed Costs:	.0330	.0278	.0185	.0138	.0131	.0129	.0115	.0116	.0085	.0075

Total Costs: .0970 .0839 .0679 .0515 .0573 .0577 .0510 .0530 .0444 .0419

# TOWN OF READING-MUNICIPAL LIGHT DEPT: Accounts Payable-December 31, 1930

		,			
	Total	Dec.	Nov.	Oct. &	. &
				Pr	Prev.
Wheeler Reflector Company \$	278.49		\$ 278.49		
George H. Buckminster Co	1,416.77	\$ 638.23	191.37	\$	587.17
Wetmore-Savage Elec. Sup. Co	1,474.08	384.87	529.96	w	59.25
Watertown Elec. Sup. Co	27.75	14.50	13.25		
George H. Wahn Company	381.90	213.47	168.43		
Ray H. Smith	504.69	421.25	83.44		
Charles W. McCauley	12.96		12.96		
Edward Langer Printing Co., Inc.	25,00		25.00		
Kelvinator Sales Corp	151.34	51.80			
Home El. Lt. & Pow. Equip. Co	00.6		00.6		
Electromaster, Inc.	.20	3.00	3.20		
Edison Elec. III. Co	15,601.13	8,333.44	7,267.69		
Van I. Bennett	90.61	32.65	57.96		
M. W. Vye Company	136.93	10.88	126.05		
Shadecraft Studios, Inc	5.00		5.00		
Robbins-Phalon Co	201.03	198.01	3.02		
Landers, Frary & Clark	182.84	39.15	143.69		
Greist Mfg. Co	44.55	7.28	37.27		
Foote-Burt Co	1.47	2.54	4.01		
Eureka Vacuum Cleaner Co	237.43	235.91	1.52		
Electric Time Company	361.50	271.67	89.83		
Dyer-Clark Co	678.92	659.40	19.52		
Addressograph Sales Agency	4.27		4.27		

Accounts Payable-December 31, 1930 (Continued)

And the second s	Total	Dec.	Nov.	Oct. &
				Prev.
M. S. Wright Company	10.00		10.00	
Wagner Electric Corp	9.17		9.17	
National Lamp Works	1,030.63	373.12	61.96	595.55
Hobbs & Warren, Inc.	\$ 14.26	\$ 14.26		
Commonwealth of Massachusetts	233.70	233.70		
One-Minute Mfg. Co	257.51	257.51		
Wakefield Item Company	3.50	3.51		
Waters-Genter Co	6.54	6.54		
T. of W. Tree Warden's Dept	15.38	15.38		
Wilmington News	35.00	35.00		
Frank Burke	00.66	00.66		
Cummings Express Company	11.30	11.30		
E. E. Harnden	51.68	51.68		
Elmore L. Howe	3.57	3.57		
Charles Tasney	46.61	46.61		
Fred M. Blair	2.80	2.80		
Clapp & Leach, Inc.	85.14	85.14		
Louis Davis	5.25	5.25		
Davis & Abbott	1.00	1.00		
Electracraft Corp	3.07	3.07		
George I. Feldman Company	87.25	87.25		
T. C. Fife, Inc.	2.25	2.25		
Frigidaire Sales Corp.	86.6	86.6		
F. S. Hardy & Co	453.15	453.15		

232.57	22.25	3.38	1,066.09	14.24	8.69	46.24	49.03	5.80	8.	17.10	1,756.67	89.25	20.65	20.00	15.73	66.27	2.00	184.39	12.00	96.18	10.50	15.00	1.25	737.12	2.50	6.24	23.40
232.57	22.25	3.38	1,066.09	14.24	8.69	46.24	49.03	5.80	.80	17.10	1,756.67	89.25	20.65	50.00	15.73	66.27	7.00	184.39	12.00	96.18	10.50	15.00	1.25	737.12	2.50	6.24	23.40
Hygrade Lamp Company	D. M. Laffin	McCaskev Register Company	Prentiss & Parker	Robeson-Rochester Corp.	Sager Electric Supply Co	Vove Electric Supply Co.	West, Elec. & Mfg. Co	Whirldry Corp.	G. H. Atkinson Company	M. F. Charles	Martin B. Hartshorn	Reading Chronicle	Percy N. Sweetser	Artfilm Studios, Inc.	Wendell Bancroft & Co.	Francis Bros.	General Equipment Corp.	Kennev Service Station	N. E. Advertising Co.	N. E. Tel. & Tel. Co. (Service Charges)	T. of R. Sewer Dept.	Sel-Plus Service	Fred F Smith	Harry H. Smith	S. R. Stembridge Co.	Aetha Electric Appliance Co.	Donaldson Lithographing Co.

Accounts Payable-December 31, 1930 (Continued)

	Total	Dec.	Now	0 1
				Prev.
Hodson Bros.	.95	0		
Alex Lindsay	3.00	3.00		
Kallway Express Agency, Inc.	9.10	9.10		
Keading Motor Company	17.28	17.28		
Standard Wife & Cable Co.	44.47	44.47		
Standard Electric Stove Co	13.44	13.44		
W. H. Willis	2.75	2.75		
T. of R. Tree Warden's Dept.	213.75	213.75		
Clark & Mills Electric Co	40.88	40.88		
Morandi-Proctor Co	93.62	7.20	100.82	
G. E. Supply Co.	272.70	88 51	18/10	
Milhender Electric Supply Co.,	87.22	78.93	8.20	
Mathias-Hart Co	52.31	10.65	41 66	
Howland Lamp Company	6.12		612	
Chicago Flexible Shaft Co.	4.05		4.05	
Yawman & Erbe Mfg. Co.	32.22	17.17	15.05	
Webster-Thomas Co.	111.26		111.26	
H. B. McArdle	27.90	13.90	14.00	
Eastern Mass. St. Ry. Co	36.38	16.38	20.00	
Carpenter Mfg. Co.	32.40		32.40	
Walker & Pratt Mfg. Co.	803.64	507.43	200.97	95.24
Seeger Retrigerator Co.	2.10			2.10
H. L. Abbott	3.00	3.00		4

											¢ 1835 11	4 1,000,1 ¢
2.12			11.85	228.52							\$ 10 236 00	\$ 10,200.70
29.55	63.96	47.85	16.86	1,516.98	25.00	7.50	4.50	1.05	6.26	57.24	\$ 20,700,01	4 20,709.01
31.67	63.96	47.85	28.71	1,745.50	25.00	7.50	4.50	1.05	6.26	57.24	\$ 32 781 02	\$ 32,701.02
Barry Motor Sales	General Electric Company	Graybar Electric Co., Inc.	Lowell Electric Light Corp	N. E. Tel. & Tel. Co. (pole line a/c)	H. F. Walker	Andrews Paper Company	J. Brinton Bailey	William C. Barrett	Boston & Maine R. R.	Gulf Refining Company	E STATE OF THE STA	Total Accounts Payable \$ 32,01.02

# LIST OF EMPLOYEES BONDED

Ite	m Name	Position		Amount
3	George M. Roundy	Collection Ag. L. (	3.	\$1000.00
4		Asst. Sup. Dist.		1000.00
6	Arthur G. Sias	Manager	Rea.	1000.00
8	Edward O. Herrick	Service Dept. Mgr.	Rea.	1000.00
10	John R. Anderson	Service	Rea.	1000.00
16	Paul E. Lane	Rec. Room Clerk	Rea.	1000.00
18	Charles E. Tasney	Sales & Collection	Rea.	1000.00
21	Hazel C. Ainsworth	Cashier	Rea.	1000.00
22	Christine Cheney	Ledger Clerk	Rea.	1000.00
24	John W. Babine	St. Lt. Service	Rea.	1000.00
25	Kathleen H. Merritt	Ledger Clerk	Rea.	1000.00
26	Edward E. Harnden	Salesman	Rea.	1000.00
29	Ralph G. Babcock	Office Manager	Rea.	1000.00
30	Benjamin J. Downs	Meter Reader	Rea.	1000.00
31	Leonard C. Whittredge	Bookkeeper	Rea.	1000.00
32	Doris S. Parker	Sales Clerk	Rea.	1000.00
33	Joseph B. McMahon	Collector	Wilm.	1000.00
34	Harold R. Metcalf	Meter Reader	Rea.	1000.00
36	Merrill P. Reed	Service	Rea.	1000.00
37	Frank J. Burke	Salesman	Somer.	1000.00
39	S. Leslie Bertwell	Service	Rea.	1000.00
40	Iris L. Birnie	Stenographer	Rea.	1000.00
41	Hector Gianascol	Meter Tester	Rea.	1000.00
42	Lyman E. Abbott	Collection Agent	N. R.	1000.00

# TOWN OF READING MUNICIPAL LIGHT DEPARTMENT Report of Audit

Year Ended December 31, 1930

January 21, 1931.

# To the Municipal Light Board, Reading, Massachusetts.

Gentlemen: In accordance with your request, we have audited the books of account of the Electric Light Department for the year ended December 31, 1930, and submit the following:

# Exhibits

A-Comparative Balance Sheet as at December 31, 1930-1929.

B—Comparative Statement of Operations for the twelve months ended December 31, 1930—1929.

C—Comparative Analysis of Profit and Loss Account for the twelve months ended December 31, 1930—1929.

# Schedules

- 1—Comparative Detail of Income for the twelve months ended December 31, 1930—1929.
- 2—Comparative Detail of Operating Expenses for the twelve months ended December 31, 1930—1929.
- 3—Detail of Bonds and Notes authorized and outstanding as of December 31, 1930.
- 4—Comparative schedule of Income and Kilowatt hours sold by towns for the twelve months ended December 31, 1930—1929.

In explanation of certain accounts and of the extent of our audit we comment as follows:

# Plant Investment-\$445,002.71

There was new construction amounting to \$38,612.67 made during the year ended December 31, 1930, of which \$25,612.17 was incurred for the improvement and extension of lines, and \$7,499.62 for improvement of the Electric Plant.

Depreciation charges for 1930 amounted to \$29,064.82, the basis being 4% of the cost of Plant Investment as at the beginning of the year. Depreciation charges are applied directly against Plant Investments, therefore the amounts shown in the accompanying Exhibit A are depreciated values.

# General Equipment-\$18,403.27

This represents the fair inventory value of the various equipment as of December 31, 1930. Book accounts were adjusted to conform with these inventory values as shown in Exhibit A.

There appeared to be an increase of \$2,256.48 during the year.

# Petty Cash Fund-\$250.00

An examination of this fund revealed the following:

Cash counted and proper office receipts representing petty disbursements—\$241.94. Collectors' change fund (not counted)—\$10.00—reflecting an overage of \$1.94.

We recommend that a cashier's daily over and short report be used.

# Construction Fund Special-\$5,109.12

This fund was created by a \$15,000.00 bond issue, from which payments were made as prescribed by bond agreement.

Verification was made with the records of the Town Treasurer.

# Depreciation Fund-\$1,451.40

An unexpended balance of this fund as of December 31, 1930, represents the excess depreciation for the year over expenditures for general new construction made.

# Consumers' Deposit Fund-\$5,904.75

This fund represents the cash reserved for an equal amount of the Department's liability to customers for guarantee deposits as of December 31, 1930.

We examined a pass book of the Mechanics Savings Bank balance of which was in accord with the books of account.

# Accounts Receivable Consumers'-\$20,355.79

Individual consumers' ledger balances as of December 31, 1930, were checked to controls which agreed as of that date.

There appeared to be accounts totaling \$2,377.62 or 11.5% of the total amount outstanding which were 90 days or more in arrears.

There was \$1,278.75 charged off as "Bad Debts" in this classification of receivables for the year.

No direct verification was made.

# Accounts Receivable-Miscellaneous-\$13,291.15

Individual accounts were checked in detail and found to be in balance with the General Ledger control as of December 31, 1930.

There was \$487.81 charged off as "Bad Debts" during the year.

It appeared that there were some accounts ranging from 1923 to 1929 inclusive, still outstanding as at the date of examination. A summary of these is as follows:

1929	\$	400.41
1928		344.04
1927		159.59
1926		
1925 and prior		
Total	 ф1	0.45 32

The installment jobbing accounts are kept on the same type of ledger card as the regular jobbing accounts. It is very difficult to determine the delinquent status of these accounts on this type of record due to the lack of information appearing on the ledger cards.

We recommend that installment or lease sales be recorded on a special ledger account, which will reflect the necessary information, without consulting the lease.

No direct verification of outstanding balances was made.

# Materials and Supplies-\$58,322.30

Inventories of the various supply accounts, taken by the department employees were furnished us priced and extended which were used as a basis of an adjustment as of December 31, 1930.

Inventories were not checked by us.

# Insurance Premiums Unexpired-\$882.94

This represents the unexpired portion of insurance premiums as of December 31, 1930, computed from policies furnished us.

# Appropriation for Construction—\$30,678.26

No appropriations from general tax levy for construction purposes have been made during the year.

# Bonds Payable-\$69,500.00

There were bonds amounting to \$11,500.00 retired during the year.

Bonds in the amount of \$15,000.00 were issued during the year at the rate of 4% per annum. These bonds were authorized in March 1930, and were dated June 1, 1930, maturing in 10 years. The provisions for retirement of this issue are \$2,000.00 each year for the first five years beginning June 1, 1931, and \$1,000.00 each year for the next five years. Interest is payable June 1, and December 1, of each year.

Verification was made with the records of the Town Treasurer of balances outstanding at the end of the year.

# Accounts Payable-\$32,781.02

A schedule of unpaid creditors accounts as of December 31, 1930, was furnished us which agreed with the General Ledger Control.

These invoices are aged as follows:

December invoices	 \$20,709.01
November invoices	 10,236.90
October and prior	 1,835.11
Total	\$32,781.02

# Consumers' Deposits-\$5,904.75

Ledger card accounts were examined as of December 31, 1930, which agreed with the control.

Interest on these deposits appeared to have been credited to consumers' accounts at the rate of 4% per annum for such deposits which had been in the custody of the Department for six months or more.

# Interest Accrued on Bonds-\$665.82

Decrease during 1930

This represents the interest accrued but not due on the balance of various issues, as shown in Schedule 3.

# Other Accrued Items-Due Town Treasurer-\$14,225.81

This represents the excess payments over receipts made by the Town Treasurer as of December 31, 1930.

Balance	December	31, 19	29	.,,,	,,	\$ 19,480.92
	December					

Interest on amounts advanced by the Town Treasurer is not accrued on the books of the Lighting Department.

\$ 5,255.11

# Loans Repayment-\$304,400.00

This account shows an increase of \$12,800.00 during the year, which is the total of bonds retired during the year of \$11,500.00, together with notes paid of \$1,300.00 as shown in Schedule 3.

# Profit and Loss-\$110,799.23

There is shown in Exhibit C an analysis of this account for the year ended December 31, 1930, which reflects a Net Increase of \$13,405.26 after taking into consideration the retirement of bonds and notes amounting to \$12,800.00.

# Operating Revenue-\$267,334.56

This revenue shows an increase of \$20,948.91 or 8.5% over 1929.

# Operating Expenses—\$233,000.41

These expenses show an increase of \$20,899.95 or 9% over 1929.

## General Comments:

We examined a list of bonded employees, which appeared to be covered for \$1,000.00 each, and we question whether or not certain employees' bonds should be increased.

No consideration is given in the attached Exhibits for accrued wages as at December 31, 1930.

We again refer to our recommendation of last year in regard to control of materials and supplies.

Respectfully submitted,

# CHARLES E. STANWOOD & SONS, INC.

# TOWN OF READING—MUNICIPAL LIGHT DEPARTMENT COMPARATIVE BALANCE SHEET—DECEMBER 31

# EXHIBIT-A

Plant I	nvestments:			Increase		
		1930	1929	Decrease*		
ASSET	S					
111	Land	\$ 2,575.80	\$ 2,575.80	\$00		
113	Structures	36,075.56	36,960.60	885.04*		
114	Boiler Plant Equipment	25,100.78	27,888.62	2,787.84*		
115	Prime Movers and Auxili-					
	aries	10,484.81	11,645.34	1,160.53*		
116	Turbo-Generator Units	16,220.15	18,094.98	1,874.83*		
117	Electric Plant-Steam	32,478.68	26,865.36	5,613.32		
125	Poles, Fixtures and Over-					
	head Conductors	223,358.20	211,520.55	11,837.65		
128	Consumers' Meters	39,336.50	40,627.36	1,290.86*		

129	Consumers' Meters Instal-				
	lations	6,520.11	6,440.88		79.23
130	Line Transformers	40,223.75			757.44
131	Transformer Installations.	4,283.96			62.91*
132	Street Lighting Equipment	8,164.72			660.63*
133	Consumers' Premises Equip.	179.69			17.15*
ТОТА	L PLANT INVESTMENT	\$445.002.71	\$435,454.86	\$ !	),547.85
General	Equipment:				
150	Office Equipment	\$ 8,426.31	\$ 7,887.55	\$	528.76
152	Stores Equipment	596.16	582.66		13.50
153	Transportation Equip	5,961.00	4,20 0.00		1.761,00
154	Laboratory Equipment	1,384.42	1,258.29		126.13
155	Miscellaneous Equipment .	2,035.38	2,218.29		182.91*
TOTAL	GENERAL EQUIPMENT	\$ 18,403.27	\$ 16,146.79	\$ 2	2,256.48
TOTAL	INVESTMENTS	\$463,405.98	\$451,601.65	\$ 11	,804.33
Current					
204-3	Petty Cash Fund	250.00	250.00		00
204-4	Construction Fund Special	5,109.12	00		5,109.12
205-1	Depreciation Fund	1,451.40	00		1,451.40
205-2	Consumers' Deposit Fund	5,904.75	4,588.21	1	,316.54
207-1	Accounts Receivable—Con-				
	sumers'	20,355.79	21,685.58		1,329.79*
207-2	Accounts Receivable—Mis-				
	cellaneous	13,291.15	11,999.22		1,291.93
209-1	Material and Supplies Gen-				
	eral:	29,464.28	23,155.59	(	5,308.69
2	Station Tools and Appli-				
	ances	391.91	714.97		323.06*
3	Distribution Tools and Ap-				
	pliances	3,236.82	3,166.97		69.85
4	Printing and Office Sup-		hm. 00		<b>**</b> 00
	plies	837.70	779.82		57.88
5	Lamps and Appliances	23,296.85	21,769.76	1	,527.09
6	Coal Supplies	641.67	176.20		465.47
9	Station Supplies	453.07	268.17		184.90
TOTAL	CLIDDENT ACCESS	\$104 CO4 E1	¢ 00 EEA 40	¢ 10	120.02
TOTAL	CURRENT ASSETS	\$104,684.51	\$ 88,554.49	\$ 10	,130.02

Prepaid	Items:						
214	Prepaid Insurance	\$	882.94	\$	1,598.20	\$	715.26*
TOTA	L ASSETS	\$	568,973.43	\$	541,754.34	\$	27,219.09
	ITIES AND SURPLUS		1930		1929		Decrease* Increase
301	Appropriations for Construction		30,678.26	\$	30,678.26	\$	00*
Bonds a	and Notes Payable:						
	Bonds Payable  Notes Payable	\$	,		66,0 00.00 1,300.00		3,500.00 1,300.00*
тота	L BONDS AND NOTES	\$	69,500.00	\$	67,300.00	\$	2,200.00
Current	Liabilities:	-		_			
308	Accounts Payable	\$	32,781.02	\$	29 954 82	\$	2 826 20
309	Consumers' Deposits				4,588.21		
ТОТАІ	CURRENT LIAB.	\$	38,685.77	\$	34,543.03	\$	4,142.74
Accrued	Item's:						
314	Interest Accrued on Bonds and Notes	\$	665.82	\$	758.16	\$	92,34*
315	Other Accrued Items—Loan						
316	Due—Town Treasurer Bond Premium		14,225.81 18.54		19,430.92 —.00		
TOTAL	ACCRUED ITEMS	\$ 1	4,910.17	\$ .	20,239.08	\$	5,328.91*
Annrone	iated Surplus:	_	-			-	
322	Loans Repayment	\$3	304,400.00	\$2	91,600.00	\$	12,800.00
	, LIABILITIES  Profit and Loss Balance—	\$4	158,174.20	\$4	144,360.37	\$	13,813.83
	Exhibit C	1	10,799,23		97,393.97		13,405.26
TOTAL	LIAB. AND SURPLUS	\$5	668,973.43	\$5	41,754.34	\$	27,219.09

# TOWN OF READING—MUNICIPAL LIGHT DEPARTMENT COMPARATIVE STATEMENT OF OPERATIONS FOR THE TWELVE MONTHS ENDED DECEMBER 31

				INCREASE	RAT	RATIOS
Reven	Revenue from Sales-Electric Energy:	1930	1929	DECREASE*	1930	1929
501-1	Metered Sales-Residence Lighting	\$143,571.90	\$128,638.20	\$14,933.70	53.7	52.2
501-1	Metered Sales—Commercial Lighting	34,599.15	32,085.82	2,513.33	12.9	13.1
501-2	Metered Sales—Commercial reguing Metered Sales—Wholesale Power	18,538.47	5,592.25	12,946.22	6.9	2.3
501-3	Metered Sales—Retail Power	33,804.59	41,422,86	7,618.27*	12.7	16,8
505-1	Sales to other Companies	507.24	359.44	147.80	2:	Τ:
505-2	Street Lighting	25,957.92	26,641.76	683.84*	6.7	10.8
505-3	Municipal Buildings-Light and Power .	2,969.37	4,831.77	1,862.40*	1.2	1.9
508	TOTAL REVENUE FROM SALES— ELECTRIC ENERGY	\$266,891.46	\$245,942.45	\$20,949.01	99.9	99.8
	TOTAL OPERATING REVENUE	\$267,334.56	\$246,385.65	\$20,948.91	100.0	100.0
Electri I III IIII IV V	Electric Operating Expenses:  I Production  II Transmission and Distribution  III Utilization  IV Commercial  V New Business	\$ 79,991.86 67,613.02 10,151.88 14,200.66 3,691.30	\$ 71,418.27 58,324.56 8,985.10 14,600.07 4,873.98	\$ 8,573.59 9,288.46 1,166.78 399.41* 1,182.68*	29.9 25.3 3.8 5.3 1.4	29.1 23.7 3.6 5.9 1.9

COMPARATIVE STATEMENT OF OPERATIONS FOR THE TWELVE MONTHS ENDED DECEMBER 31	FEMENT OF CONTHS ENDED	PERATION DECEMBE	VS ER 31	Exhi	Exhibit—B Continued
VI General and Miscellaneous	<b>1930</b> 57,351.69	<b>1929</b> 53,898.48	INCREASE DECREASE* 3,453.21	RATIOS 1930 193 21.5 21	1929 1929 21.9
TOTAL OPERATING EXPENSES	\$233,000.41	\$212,100.46	\$20,899.95	87.2	86.1
NET OPERATING REVENUE	\$ 34,334.15	\$ 34,285.19	\$ 48.96	12.8	13.9
	\$ 1,731.56 810.23 \$ 2,541.79 \$ 31,792.36	\$ 2,423.72 693.28 \$ 3,117.00 \$ 31,168.19	\$ 692.16* 116.95 \$ 575.21* \$ 624.17	12	
560 Merchandise and Jobbing Revenue 563 Interest Income	\$ 2,543.33 104.89 00	\$ 462.17 <b>47.23</b> 3.00	\$ 3,005.50* 152.12 3.00*		
TOTAL, NON-OPERATING INCOME	\$ 2,438.44	\$ 417.94	\$ 2,856.38*		
TOTAL INCOME	\$ 29,353.92	\$ 31,586.13	\$ 2,232,21*		
Deductions from Total Income: 576 Interest on Bonds and Notes	\$ 3,148.66 \$ 26,205.26	\$ 3,440.81	\$ 292.15* \$ 1,940.06*		

# BONDS AND NOTES AUTHORIZED AND OUTSTANDING TOWN OF READING MUNICIPAL LIGHT DEPARTMENT

AS OF DECEMBER 31, 1930

			AS OF DECEMBER 31, 1930	IBER	31, 1930		01	Schedule 3
5				1		Retired		
Do.	Date	Original		Rate of	f	During Ba	During Bal. Outstanding Accrued	g Accrued
Anthorized		Issue	Payments of Principal	Int.	Int. Payable	Year	Dec. 31, 1930 Interest	Interest
August 1894	10	\$ 50,000.00	\$1000. yearly 10 years	4%	Apr. 1-October 1	\$	\$ 00 \$	\$
May 1907		26.000.00	1000, yearly 26 years	41/2	Apr. 1-Oct. 1	1,000	3,000.00	33.75
	7-15-1911	20,000.00	2000. yearly 10 years	4	Jan. 15-July 15	00.—	00.	00.
August 1913		23,500.00	1500, yearly 9 years	41/4	Apr. 15-Oct. 15	1,000.00	2,000.00	17.71
			1000. yearly 10 years					
		8,000.00	500, yearly 16 years	41/2	Mar. 15-Sept. 15	500.00	00.—	00.—
March 1916	16 5-15-1916	10,000.00	500, yearly 20 years	4	Nov. 15-May 15	500.00	3,000.00	15.00
March 1917		55,000.00	3000. yearly 18 years	41/2	Apr. 15-Oct. 15	3,000.00	16,000.00	180.00
			1000, yearly 1 years					
October 1918	1- 1-1919	12,000.00	1000. yearly 4 years	41/2	Jan. 1-July 1	500.00	4,500.00	101.25
			500. yearly 16 years					
March 191		20,000.00	1000, yearly 20 years	43/4	Oct. 1-April 1	1,000.00	9,000.00	106.87
March 1920		20,000.00	1000. yearly 20 years	N	Nov. 1-May 1	1,000.00	10,000.00	83.34
Dec. 19.		10,000.00	1000, yearly 10 years	41/2	June 1-Dec. 1	1,000.00	3,000.00	11.25
March 1926	26 8- 1-1926	13,000.00	3000. yearly 1 years	4	Feb. 1-Aug. 1	2,000.00	4,000.00	66.65
			yearly					
March , 1930	6- 1-1930	15,000.00	yearly	4	June 1-Dec. 1	00:	15,000.00	20.00
	<i>,</i>		1000, yearly 5 years					
Total Bond	Total Bonds	\$282,500.00				\$11,500.00	\$69,500.00	\$ 665.82

	A C OF DECEMBED 21 1020
Con	BONDS AND NOTES AUTHORIZED AND OUTSTANDING
Sche	TOWN OF READING MUNICIPAL LIGHT DEPARTMENT

During B. Retired Rate of Original Date

~	מי	st	00.00.00.00.	
e	nue	rue	00000	
np	ıţı.	g Acrued Interest		
Schedule	Continued	Cit	↔	
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		0 5		

Year

Int. Payable

Payments of Principal Int.

Issue

Issued

sue Authorized o. of Date

:SQNC

OTES:

Continued	Acrued	00.00	00:-
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	al. Oust Dec. 3		

00.— 00.— 00.— 00:

May 15-Nov. 15

Nov. 15, 1910 .500. Nov. 15, 1911

Tune 7-Dec. 7

fan. 15-July 15

33/4

5 years

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9681

12- 9-1896 7-15-1898

1896 1898

Dec.

March

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60

5- 1-1896

1895

March March

yearly 1 year

July 15, 1901 July 15, 1904 Dec. 7, 1906

3,000.00

2000. 1000.

1400. .000

1,400.00

12- 7-1903

1903

March

11-15-1909

1909

March

2,500.00

5 years

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June 9-Dec. 9 Nov. 1-May 1 Nov. 1-May 1

Sept. 27-Mar. 27

July 21-Jan. 21

Oct. 16-April 16 Nov. 15-May 15

.500, yearly 9 years 800. yearly 15 years 500, yearly 8 years yearly 13 years yearly 2 years 7 years

.000, yearly 12 years

1800. Jan. 3, 1913

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2200\, July 12, 1912

2,200.00 3,500.00

3-27-1910

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1911

June

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6061

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6,500.00 3,000.00 7,000.00 7,000.00

2,000.00

5-15-1915 7-15-1915 9-22-1917 1-20-1919

1915

March March March

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1917

1919

Nov.

4-16-1913

1913

March

Jan. 12-July 12

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Mar. 22-Sept. 22

Jan. 15-July 15

May 20-Nov. 20

June 15-Dec. 15

7 years

\$ 91,400.00

Total Notes

2-15-1922

7- 1-1921

1921

March

Dec.

\$373,900.00

Total Bonds and Notes .

yearly yearly

Jan. 1-July 1

00:

00.— 00.— 00.—

665.82

4

\$69,500.00

\$12,800.00

4

00.

4

\$ 1,300.00

# TOWN OF READING MUNICIPAL LIGHT DEPARTMENT COMPARATIVE ANALYSIS OF PROFIT AND LOSS FOR THE TWELVE MONTHS ENDED DECEMBER 31 EXHIBIT—C

Balance—January 1	1930 \$ 97,393.97	1929 \$ 83,048.65	Increase Decrease* \$14,345.32
Additions: Net Income—Exhibit B	26,205.26	28,145.32	1,940.06*
	\$123,599.23	\$111 <b>,</b> 193.97	\$12,405.26
Deductions:			
Bonds Retired	\$ 11,500.00 1,300.00	\$ 11,50 0.00 2,30 0.00	\$ —.00 1,000.00*
TOTAL DEDUCTIONS	\$ 12,800.00	\$ 13,800.00	\$ 1,000.00*
Balance—December 31, Exhibit A.	\$110,799.23	\$ 97,393.97	\$13,405.26
Net Increase in Profit and Loss for year	\$ 13,405.26	\$ 14,345.32	\$ 940.06*

# TOWN OF READING—MUNICIPAL LIGHT DEPARTMENT COMPARATIVE DETAIL OF OPERATING EXPENSES FOR THE TWELVE MONTHS ENDED DECEMBER 31.

#### I Production Expenses:

-						
			1020	1020		ncrease
			1930	1929	D	ecrease*
	601	Superintendence and Labor	\$ 62.33	\$ 585.96	\$	523.63*
	606	Boiler Fuel	00	1,501.98		1,501.98*
	607	Water for Steam	23.50	59.50		36.00*
	608	Lubricants	7.47	00		7.47
	609	Station Supplies	1,215.48	1,099.37		116.11
	611	Maintenance of Station				
		Structures	432.91	772.36		339.45*
	612	Maintenance of Boiler Plant				
		Equipment	15.00	225.72		210.72*
	613	Maintenance of Steam En-				
		gines	00	00		.00

614 Maintenance of Turbo-Gen-

614	Maintenance of Turbo-Generator Units	00	226.24		<b>2</b> 26.24*
615	Maintenance of Electric				
	Generator Equipment	23.11	15.80		<b>7.</b> 31
616		<0.00	20.52		22.26
(24	Electric Equipment	60.99			23.26
634	Electric Energy Purchased	/8,151.0/	00,898.01		11,252.40
	Total Production Expenses	\$ 79,991.86	\$ 71,418.27	\$	8,573.59
n	Transmission and Distribution	on Expenses	:		
636	Transformer Station and				
	Sub-station Superintendence and Labor	ф 0 600 <b>2</b> 2	\$ 8,540.16	φ	149.07
637		ф 0,000.23	ф 8,340.10	ф	140.07
037	Sub-station Supplies and				
	Expense	7,218.17	7,293.88		75.71*
638	Operation of Transmission		6		
	and Distribution Lines	21,831.76	19,586.90		2,244.86
639	Transmission and Distribution Supplies and Ex-				
	pense	251.83	321.91		70.08*
640					
	Meters	2,80,4.09	2,511.64		292.45
641	Removing and Resetting				
	Meters	2,515.50	2,704.63		189.13*
642	Removing and Resetting	494.08	838.97		344.89*
ú46		12 1.00	000.27		011.05
	Station and Sub-station.	13.64	00		13.64
647	Maintenance of Transmis-				
	sion and Distribution	22 1 45 20	15 520 40		( (14.00
(50	Lines	22,145.39	15,530.40		6,614.99
650	Maintenance of Consumers' Meters	614.09	322.07		292.02
651					
	ers	1,036.24	674.00		362.24
	Total Transmission and Dis-	0 (7 (12 02	o FO 204 FC	ф	0.200.46
	tribution Expenses	\$ 67,613.02	\$ 58,324.56	\$	9,288.40

# TOWN OF READING MUNICIPAL LIGHT DEPARTMENT COMPARATIVE DETAIL OF OPERATING EXPENSES FOR THE TWELVE MONTHS ENDED DECEMBER 31

					I	ncrease
		1930		1929	D	ecrease*
III Ut	ilization Expenses:					
654	Municipal Street Lamps-					
	Labor\$	1,209.65	\$	879.17	\$	330.48
655	Municipal Street Lamps					
	Supplies and Expenses	1,204.85		1,765.01		560.16*
657	Maintenance of Municipal					
	Street Lamps	1,664.73		821.95		842.78
659	Maintenance of Consumers'					
	Installations	6,072.65		5,518.97		553.68
		10.151.00	_	0.005.10		4.4.66.70
lota	d Utilization Expenses \$	10,151.83	\$	8,985.10	\$	1,166.78
111.0	. 1 . 12		-			
	ommercial Expenses:	10 575 07	Φ	10 741 07	Φ.	1// 00ok
	Commercial Salaries \$ ommercial Supplies and Ex-	10,575.07	Þ	10,741.95	4	166.88*
	* *	3,625.59		3,858.12		232.53*
	penses	3,023.39		3,030.12		434,33*
Tota	l Commercial Expenses \$	14 200 66	φ	14 600 07		399.41*
1010	ii Commercial Expenses $\phi$	14,200.00	Ψ_	14,000.07	Ψ _	377.71
VN	ew Business Expenses:					
	New Business Salaries \$	163.33	\$	1,833.75	S	1,670.42*
663	New Business Supplies and		т	-,	٦.	*,0******
	Expenses	68.34	"	00		68.34
664	•	3,459.63		3,040.23		419.40
			-			
Tota	l New Business Expenses\$	3,691.30	\$	4,873.98	\$	1,182.68*
			-			
VI M	lisc. and General Expenses.					
656		\$ 5,842.51	\$	5,200.00	\$	642.51
667	Salaries of General Office					
	Clerks	4,561.33		4,104.00		457.33
663	General Office Supplies					
	and Expenses	1,466.55		1,561.02	٠	94.47*
	eneral Office Rents	1,111.88		1,774.09		662.21*
	Insurance	5,391.74		5,299.42		92.32
	Accidents and Damages	62.89		75.00		12.11*
674	Store Expenses	4,093.21		4,221.82		128.61*

675 Transportation Expense	3,229.11	3,313.77	84.66*
676 Inventory Adjustments	1,716.26	874.89	841.37
677 Maintenance of General			
Structures	539.00	51.42	487.58
678 Depreciation	29,064.82	27,186.35	1,878.47
679 Miscellaneous General Ex-			
pense	272.39	236.70	35.69
Total Miscellaneous and Gen-			
eral Expenses	\$ 57,351.69	\$53,898.48	\$ 3,453.21
			***********
Total Operating Expenses	\$233,000.41	\$212,100.46	\$20,899.95

# TOWN OF READING—MUNICIPAL LIGHT DEPARTMENT COMPARATIVE DETAIL OF INCOME FOR THE TWELVE MONTHS ENDED DECEMBER 31

*				
	1930	1929		crease crease*
Metered Sales—Residence Lighting	:			
Reading	\$ 83,174.15	\$ 74,635.80	\$	8,538.35
Lynnfield Center	10,787.54	9,576.49		1,211.05
North Reading	16,948.79	15,368.82		1,579.97
Wilmington	32,661.42	29,057.09		3,604.33
Total Residence Lighting In-				
come	\$143,571.90	\$128,638.20	\$	14,933.70
Metered Sales—Retail Power:	+			
Reading	\$29,910.81	\$ 31,919.72	\$	2,008.91*
Lynnfield Center	441.59	433.93	Ψ	7.66
North Reading	2,237.40			997.76*
Wilmington	1,214.79	5,834.05		4,619.26*
***************************************				
Total Retail Power Income	\$ 33,804.59	\$ 41,422.86	\$	7,618.27*
Metered Sales-Commercial Lightin				
Reading	\$ 23,178.51	\$ 21,371.94	\$	1,806.57
Lynnfield Center	1,451.46	1,007.37		444.09
North Reading	3,693.84	,		8.83*
Wilmington	6,275.34	6,003.84		271.50

Total Commercial Lighting					
Income	\$ 34,5	99.15	32,085.82	\$	2,513.33
Metered Sales—Commercial Heating	:			_	
Reading		0.84 \$	3,681.43	\$	549.41
Lynnfield Center		7.59	377.34		20.25
North Reading	1,14	4.60	1,148.12		3.52*
Wilmington	1,16	9.79	1,163.46		6.33
				_	
Total Commerical Heating					
Income	\$ 6,94	2.82 \$	6,370.35	\$	572.47
Metered Sales-Wholesale Power:					
Reading	\$ 7,74	4.23 \$	2,691.85	\$	5,052.38
Lynnfield	-	00	00		00
North Reading	<b>7</b> 8	35.55	559.10		226.45
Wilmington	10,00	)8.69 	2,341.30		7,667.39
Total Wholesale Power In-					
come	\$ 18,53	88.47 \$	5,592.25	\$	12,946.22
Total Metered Light, Heat,					
and Power Income	\$237,45	6.93 \$2	214,109.48	\$	23,347.45

# TOWN OF READING—MUNICIPAL LIGHT DEPARTMENT COMPARATIVE DETAIL OF INCOME FOR THE TWELVE MONTHS ENDED DECEMBER 31.

		_				
		1930		1929		ncrease ecrease*
Sales To Other Electric Companies	:					
Wakefield		200.80	\$	105.84	\$	°94.96
Lowell		111.86		104.92		6.94
Lawrence		139.80		108.84		30.96
Peabody		6.54		6.24		.30
Edison Illuminating Company		48.24		33.60		14.64
	_		_		_	
Total Sales To Other Com-						
panies	\$	507.24	\$	359.44	\$	147.80
Municipal Revenue:						
Street Lighting:						
Reading	\$	12,000.00	\$	13,000.00	\$	1,000.00*
Lynnfield Center		2,197.17		2,121.73		75.44

North Reading	4,103.99 7,656.76	3,957.78 7,562.25	146.21 94.51
Total Street Lighting Income	\$ 25,957.92	\$ 26,641.76	\$ 683.84*
Buildings:			
Lighting Power		\$ 1,808.50 3,023.27	
Total Income — Municipal Buildings Total Income From Sales —	\$ 2,969.37	\$ 4,831.77	\$ 1,862.40*
Electric Energy (Exhibit B)	\$266,891.46	\$245,942.45	\$ 20,949.01

#### TOWN OF READING

#### MUNICIPAL LIGHT DEPARTMENT

READING:	1930	19 <b>2</b> 9
Gross Revenue—Residence Lighting \$	83,174.15	\$ 74,635.80
Kilowatt Hours Sold	1,749,344	1,526,204
Gross Revenue-Retail Power	29,910.81	31,919.72
Kilowatt Hours Sold	949,838	1,038,734
Gross Revenue—Commercial Lighting	23,178.51	21,371.94
Kilowatt Hours Sold	361,849	327,383
Gross Revenue—Commercial Heating	4,230.84	3,681.43
Kilowatt Hours Sold	132,187	116,711
Gross Revenue-Wholesale Power	7,744.23	2,691.85
Kilowatt Hours Sold	392,413	105,800
Gross Revenue-Municipal Power	1,053.65	3,023.27
Kilowatt Hours Sold	41,167	121,652
Gross Revenue-Municipal Light	1,915.72	1,803.50
Kilowatt Hours Sold	98,495	85,790
Gross Revenue—Street Lights	12,000.00	13,000.00
Kilowatt Hours Sold	298,730	278,217
LYNNFIELD:		
Gross Revenue-Residence Lighting \$	10,787.54	\$ 9,576.49
Kilowatt Hours Sold	189,367	166,338
Gross Revenue-Retail Power	441.59	433.93
Kilowatt Hours Sold	6,604	6,738
Gross Revenue—Commercial Lighting	1,451.46	1,007.37

T.	Y	N	N	FI	E	T.	n	

Kilowatt Hours Sold	19,144	12,063
Gross Revenue—Commercial Heating	397.59	377.34
Kilowatt Hours Sold	11,501	10,843
Gross Revenue—Street Lights	2,197.17	2,121.73
Kilowatt Hours Sold	12,257	12,607
NORTH READING:		
Gross Revenue-Residence Lighting \$	16,948.79	\$ 15,368.82
Kilowatt Hours Sold	281,703	263,442
Gross Revenue-Retail Power	2,237.40	3,235.16
Kilowatt Hours Sold	38,551	70,153
Gross Revenue—Commercial Lighting	3,693.84	3,702.67
Kilowatt Hours Sold	43,078	42,297
Gross Revenue—Commercial Heating	1,144.60	1,148.12
Kilowatt Hours Sold	26,752	31,251
Gross Revenue—Wholesale Power	785.55	559.10
Kilowatt Hours Sold	36,900	14,950
Gross Revenue—Street Lights	4,103.99	3,957.78
Kilowatt Hours Sold	27,656	26,905
WILMINGTON:		
Gross Revenue-Residence Lighting \$	32,661.42	\$ 29,057.09
Kilowatt Hours Sold	557,063	484,413
Gross Revenue—Retail Power	1,214.79	5,834.05
Kilowatt Hours Sold	20,057	217,463
Gross Revenue—Commercial Lighting	6,275.34	6,003.84
Kilowatt Hours Sold	76,356	70,862
Gross Revenue—Commercial Heating	1,169.79	1,163.46
Kilowatt Hours Sold	30,711	30,343
Gross Revenue-Power Wholesale	10,008.69	2,341.30
Kilowatt Hours Sold	539,000	116,400
Gross Revenue—Street Lights	7,656.76	7,562.25
Kilowatt Hours Sold	55,798	55,995



#### ANNUAL REPORT

OF THE

#### **TOWN ACCOUNTANT**

RECEIPTS AND EXPENDITURES

For the Year Ended December 31

1930

## REPORT OF TOWN ACCOUNTANT Receipts 1930

Grace V. Viall, Collector Poll Taxes Personal Estate Taxes Real Estate Taxes	\$	5,656.00 35,687.79 425,232.63	
Interest on same		6,159.56	
Motor Vehicle Excise Taxes		25,550.18	
Interest on same		222.95	
Moth Assessments		816.50	
Sewer Assessments		2,136.00	
Interest on same		318.34	
Sewer Rentals		8,745.59	
Interest on same		22.64	
Sidewalk Assessments		387.24	
Costs and Charges, less fees		872.60	
Sale of Property		22.00	
* *	_		\$511,830.02
Preston F. Nichols, Treasurer			
Interest on deposits	\$	1,666.74	
Moth and Tree Work Charges		2,193.25	
Redemption of property taken,			
Taxes, interest, etc		4,953.31	
Additional interest		582.19	
Additional costs		47.55	
Cemetery Bequest Fund:			
Bequests	\$	2,465.00	
Income		1,260.00	
For Transfer		6,645.97	
Adjustment		125.00	
Hospital Fund:			
Refund	\$	18.00	
Income		5,279.00	
For Transfer		1,994.61	
Reading High School Scholarship Fund:			
Income	\$	150.00	
For Transfer		250.00	
Loans, Anticipation of Revenue	5	25,000.00	
Mun. Lt. Dept. Reimbursement		80.46	
Water Dept. Reimbursement		141.05	
Bond Issues, Premiums & Accrued Interest:			
Water Dept. Extension	\$ .	35,000.00	
Premium		231.00	
Accrued Interest		58.33	

Municipal Light Dept		15,000.00		
Premium		99.00		
Accrued Interest		25.00		
Police Building		45,000.00		
Premium		297.00		
Accrued Interest		75.00		
Premium on Temp. Loans		2.25		
	_		\$6	48,639.71
County of Middlesex Dog Tax			\$	1,444.88
Commonwealth of Massachusetts:				
Taxes, etc.				
Income Tax	\$	70,901.50		
Corporation Tax		9,485.19		
Public Service Tax		2,648.32		
National Bank Tax		1,477.62		
Trust Company Tax		572.31		
Soldiers' Exemption		74.87		
State Aid, Reimbursement		96.00		
Military Aid Reimbursement		57.50		
Snow and Ice Removal Tax		324.03		
	_		\$	85,637.34
Board of Selectmen: Licenses, etc.:				
Second Hand Motor Vehicle	\$	100.00		
Motor Bus		100.00		
Taxi Cab		14.00		
Truck		27.00		
Victualers		29.50		
Lord's Day		167.50		
Inn Holder		1.00		
Third Class Liquor		1.00		
Theatre		5.00		
		5.00		
Pop Corn		1.00		
Pop Corn				
		1.00		
Auctioneers		1.00 10.00		
Auctioneers		1.00 10.00 75.00		
Auctioneers Junk Dealers Bowling and Pool Old Metal Dealer Revolver		1.00 10.00 75.00 20.00 2.00 19.50		
Auctioneers Junk Dealers Bowling and Pool Old Metal Dealer Revolver Amusement		1.00 10.00 75.00 20.00 2.00 19.50 25.50		
Auctioneers Junk Dealers Bowling and Pool Old Metal Dealer Revolver Amusement Indoor Golf		1.00 10.00 75.00 20.00 2.00 19.50 25.50 10.00		
Auctioneers Junk Dealers Bowling and Pool Old Metal Dealer Revolver Amusement		1.00 10.00 75.00 20.00 2.00 19.50 25.50		(5)
Auctioneers Junk Dealers Bowling and Pool Old Metal Dealer Revolver Amusement Indoor Golf Advertising Hearings		1.00 10.00 75.00 20.00 2.00 19.50 25.50 10.00 45.00	\$	653.00
Auctioneers Junk Dealers Bowling and Pool Old Metal Dealer Revolver Amusement Indoor Golf Advertising Hearings  Special Fund for Unemployed	- \$	1.00 10.00 75.00 20.00 2.00 19.50 25.50 10.00 45.00	\$	653.00
Auctioneers Junk Dealers Bowling and Pool Old Metal Dealer Revolver Amusement Indoor Golf Advertising Hearings	- \$	1.00 10.00 75.00 20.00 2.00 19.50 25.50 10.00 45.00	\$5	653.00

Police Department:			
Court Fines	\$	950.00	
Miscellaneous	·	90.00	
			\$ 1,040.00
Fire Department:			
Sale Junk, etc.			10.00
Sealer of Weights and Measures:			20100
			72.43
Fees			72.43
Inspector of Milk:			
Fees			29.00
Commonwealth of Massachusetts:			
Peddlers' Licenses			28.00
Board of Health, Licenses, etc.:			
Hair Dressers	\$	8.00	
Masseuse		2.00	
Denatured Alcohol		10.00	
Slaughtering		100.00	
Pasteurizing		10.00	
Town of Wakefield		18.39	
Division of Tuberculosis		82.14	
Sundry Receipts		77.72	
	_		\$ 308.25
Board of Public Works:			
General Account	\$	401.10	
Highway Department:			
Commonwealth of Massachusetts		2,956.66	
County of Middlesex		2,956.66	
Snow Removal		14.00	
Highway Department Sales, etc		600.00	
Highway Department Reimbursement		249.97	
			\$ 7,178.39
Board of Public Welfare:			
Commonwealth of Massachusetts,			
Reimbursements			
Mothers' Aid	\$	1,499.83	
Temporary Aid		2,323.62	
Commonwealth of Massachusetts and Cities			
and Towns Reimbursements		1,808.14	
Hospital Fund Reimbursement		662.90	
	_		\$ 6,294.49
School Department:			
Commonwealth of Massachusetts			
Tuition, State Wards	\$	,	
Town of North Reading Tuition		14,920.82	

Town of Wakefield Tuition Town of Tewksbury Tuition Sundry Parties, Tuition Commonwealth of Massachusetts		203.69 117.00 185.60		
Aid to Agricultural School		1,357.52		
Commonwealth of Massachusetts		205.21		
Vocational Education		185.70		
George Reed Fund		20.17		
Sundry Receipts		76.09		
Sundry Receipts			\$	20,020.05
Public Library:			·	
Fines, etc.			\$	388.49
Cemetery Department:				
Sale Lots and Graves	\$	1,402.50		
Interest on deferred payments, etc	1	10.21		
Care Lots and Graves, etc.		2,980.25		
Bequest Fund for care endowed lots		1,645.97		
For care of Soldiers' Graves		136.00		
From George F. Buck Fund		6.48		
			\$	6,181.41
Guarantee Deposits:				
Sewer House Connections	\$	2,167.41		
Cemetery Work		193.00		
	_		\$	2,360.41
Water Department:				
Meter Rates, etc			\$	57,237.51
Municipal Light Department:				•
Light, Power, Rates, etc.			\$3	19,807.69
Insurance Account:				
Municipal Light Department	\$	820.75		
Water Department		200.90		
Cemetery Department		10.00		
			\$	1,031.65
Refunds:				
Town Clerk's Expense	\$	6.00		
Public Welfare Department		64.00		
Public Library		3.50		
Police Building		11.36		
Cemetery Department		3.20		
School Department		30.40		
Soldiers' Relief		72.00		100 4=
	_		\$	190.46

Other Receipts:  Municipal Light Department Tax Treasurer's Expense Account Unpaid Checks Sundry Receipts  Total Receipts  PAYMENTS	\$	225.01 10.00 27.73 18.34	<b>\$</b> \$1,67	281.08  70,979.26
GENERAL GOVERNMEN	T			
Selectmen's Expenses Selectmen's Clerical Town Accountant's Salary Treasurer's Salary Treasurer's Expenses Collector's Salary Collector's Expenses Collector's Clerical Assessors' Salaries Assessors' Expenses Assessors' Clerical Block System Survey Town Counsel's Salary Town Counsel's Expenses Town Clerk's Salary Town Clerk's Expenses Bd. of 'Pub. Wrks. Sal. and Off. Exp. Registrars' Salaries Election and Registration Expenses	\$	324.93 1,310.00 2,000.00 1,200.00 623.56 2,300.00 1,246.55 398.50 1,800.00 1,367.27 2,756.00 465.37 500.00 105.29 350.00 604.94 5,996.26 250.00 1,656.58		25,255.25
GENERAL ACCOUNTS				
Miscellaneous Expenses  Municipal Building Maintenance  Fire Stations, Maintenance  G. A. R. Rooms, Light  Insurance  Interest  Maturing Debt, not including Water, Light or  Sewer  Planning Board Expenses	\$	3,551.32 2,669.37 945.73 9.06 6,661.24 26,859.50 38,000.00 120.32		78,816.54

PROTECTION OF PERSONS AND	PROPERTY	۲
Police Dept., Maintenance	\$ 3,705.27	
Police Dept. Salaries and Spec. Officers	30,893.07	
Fire Dept., Maintenance	3,127.18	
Fire Dept., Salaries	19,800.00	
Fire Dept., Call Men, Salaries	3,367.00	
Fire Alarm, Maintenance and New Boxes	3,484.53	
Moth Dept., Maintenance	6,000.46	
Tree Warden, Maintenance	2,796.38	
Forest Warden, Maintenance	531.89	
Hydrant Rentals	. 7,980.00	
Drinking Fountains	100.00	
Inspector of Buildings, Salary	500.00	
Inspector of Wires, Salary	200.00	
Inspector of Wires, Expenses	10.85	
Sealer of W. and M. Salary	500.00	
Sealer of W. and M. Expenses	220.73	
		\$ 83,217.36
HEALTH AND SANITATI	ON	
Board of Health, Salaries	\$ 300.00	
Board of Health, Expenses	468.49	
Inspector of Plumbing, Salary	800.00	
Inspector of Animals, Salary	200.00	
Inspector of Milk, Salary	100.00	
Care of Contagious Diseases	3,000.57	
Garbage Collection	2,300.00	
,		\$ 7,169.06
HIGHWAYS		
Highway Dept., Maintenance	\$ 46,941.91	
Sidewalk Construction	7,969.57	
Snow and Ice Removal	4,295.21	
Maintenance Storm Drains	2,412.91	
Drainage System	14,843.81	
Care of Dumps	492.41	
Salem St. Construction	8,869.98	A 05 005 00
d. Titut		\$ 85,825.80
Street Lighting		\$ 12,000.00
CHARITIES AND AID Board of Public Welfare:		
	\$ 600.00	
Visitor's Salary	352.00	
Aid, Board and Care	14,648.39	
Mothers' Aid	4,081.93	
Temporary Aid	3,265.01	
remporary Aid	3,203.01	\$ 72.047 **
		\$ 22,947.33

#### SOLDIERS' BENEFITS

SOLDIERS BEREFITS			
State Aid	\$ 108.00		
Military Aid	5.00		
Soldiers' Relief	8,449.16		
9		\$ 8	,562.16
EDUCATION		, -	,
School Department:			
General Maintenance	¢ 40.062.02		
	\$ 49,963.03		
General Salaries	178,259.47		
Agricultural Maintenance	261.33		
Agricultural Salaries	2,696.64		
Vocational Tuition	1,040.21		
		\$232,	220.68
Public Library Maintenance	3,152.59		
Public Library Salaries	4,637.15		
		\$ 7,	789.74
RECREATION			
Park Dept., Maintenance		\$ 4.	993.09
CEMETERIES		т -,	
	\$ 13,183.84		
Forest Glen Cemetery, Development	1,249.98		
Potest Gien Cemetery, Development	1,249.90	¢ 1.4	433.82
MEMORIAL DAY		φ 14,	+33.64
	\$ 566.19		
OTHER PAYMENTS	φ 500.19		
	\$ 360.00		
Care Soldiers' Graves	600.00		
Child Welfare Work	400.00		
Middlesex Co. Bur. of Agri.	200.00		
Reading Post 62 A. L. Rent	1,000.00		
	20,295.91		
Sewer Dept., Maint. Incl. Bond Payments			
Sewer Dept., House Connections	1,531.17		
Water Dept., Maint. Incl. Bond and Int.	70.754.00		
Payments	72,754.22		
Water Mains Extension	1,222.58		
Water Dept. New Stand Pipe	29,913.83		
Municipal Light Dept., Maint. Incl. Bonds and	212 102 56		
Notes and Interest	313,103.56		
Municipal Light Dept. New Construction	10,014.88		
State Tax	14,840.00		
County Tax	24,423.85		
State Highway Tax	2,035.00		
Snow Removal Tax	324.03 146.14		

Municipal Lighting Tax	78.73	
National Bank & Trust Co	428.19	
Metropolitan Sewer Assessments	8,118.01	
Temp. Loans, Anticipation of Revenue	475,000.00	
Cemetery Bequest Fund Transfer	10,370.97	
Hospital Fund Transfer	7,317.32	
R. H. Sch. Scholarship Fund Transfer	400.00	
Smith-Hughes Fund to Agr. Dept. Salaries	176.68	
Building Laws Expense	33.55	
Town Forest	1,496.91	
Drainage System Survey	687.49	
Athletic Field Survey	8.00	
American Legion Entertainment	300.00	
Special Fund for Unemployed	50.00	
Care of Police Station	33.13	
Bond Issue Expense	392.95	
Tercentenary Observance	2,898.60	
Public Playground, Birch Meadow	2,522.11	
Police Building Construction	41,194.47	
Refunds from Guarantee Deposits	419.16	
Refunds Per. and Real Estate Taxes	182.91	
Refunds, Motor Vehicle Excise Taxes	398.21	
Refunds Miscellaneous	10.75	
Refunds, Miscellaneous		
Retuints, Miscellaneous		\$1,045,683.31
Total Payments	-	\$1,045,683.31
	-	
Total Payments	-	\$1,629,480.33
Total Payments	-	\$1,629,480.33 \$ 49,341.28
Total Payments	-	\$1,629,480.33
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930	-	\$1,629,480.33 \$ 49,341.28
Total Payments	-	\$1,629,480.33 \$ 49,341.28 1,670,977.74
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930	-	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930	-	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19	-	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19  GENERAL GOVERNMEN	- - 930	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19  GENERAL GOVERNMEN Selectmen's Expenses	930 T \$ 300.00	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19  GENERAL GOVERNMEN Selectmen's Expenses Selectmen's Clerical	930 T \$ 300.00 1,310.00	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33 \$ 90,838.69
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19  GENERAL GOVERNMEN Selectmen's Expenses Selectmen's Clerical Town Accountant's Salary	930 T \$ 300.00 1,310.00 2,000.00	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33 \$ 90,838.69
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19  GENERAL GOVERNMEN Selectmen's Expenses Selectmen's Clerical Town Accountant's Salary Treasurer's Salary	930 T \$ 300.00 1,310.00 2,000.00 1,200.00	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33 \$ 90,838.69
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19  GENERAL GOVERNMEN Selectmen's Expenses Selectmen's Clerical Town Accountant's Salary Treasurer's Salary Treasurer's Expenses	930 T \$ 300.00 1,310.00 2,000.00 1,200.00 600.00	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33 \$ 90,838.69
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19  GENERAL GOVERNMEN Selectmen's Expenses Selectmen's Clerical Town Accountant's Salary Treasurer's Salary Treasurer's Expenses Collector's Salary.	\$ 300.00 1,310.00 2,000.00 1,200.00 600.00 2,300.00	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33 \$ 90,838.69
Total Payments  TREASURER'S CASH Balance on hand Jan. 1, 1930 Receipts, 1930  Payments, 1930  Balance on hand, Dec. 31, 1930  APPROPRIATIONS FOR 19  GENERAL GOVERNMEN Selectmen's Expenses Selectmen's Clerical Town Accountant's Salary Treasurer's Salary Treasurer's Expenses	930 T \$ 300.00 1,310.00 2,000.00 1,200.00 600.00	\$1,629,480.33 \$ 49,341.28 1,670,977.74 1,720,319.02 1,629,480.33 \$ 90,838.69

Assessors' Salaries	1,800.00	
Assessors' Expenses	1,400.00	
Assessors' Clerical	2,756.00	
Block System Survey	500.00	
Town Counsel's Salary	500.00	
Town Counsel's Expenses	100.00	
Town Clerk's Salary	350.00	
Town Clerk's Expenses	690.00	
Board of Pub. Wrks. Salary and Off. Exp	6,000.00	
Registrars' Salaries	250.00	
Election and Registration Expenses	1,500.00	
		\$ 25,166.00
GENERAL ACCOUNTS		
	¢ 2500.00	
Miscellaneous Expenses	\$ 2,500.00	
Municipal Bldg., Maintenance	3,000.00	
Fire Stations, Maintenance and Repairs	1,450.00	
G. A. R. Rooms, Light	25.00	
Insurance	5,750.00	
Interest	28,000.00	
Planning Board Expenses	350.00	
Maturing Debt, not including Water, Light,		
C .	20 000 00	
Sewer	38,000.00	¢ 70.075.00
		\$ 79,075.00
PROTECTION OF PERSONS AND		,
PROTECTION OF PERSONS AND Police Dept., Maintenance	PROPERTY \$ 3,655.00	,
PROTECTION OF PERSONS AND Police Dept., Maintenance Police Dept., Salaries and Special Officers	PROPERTY	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance  Police Dept., Salaries and Special Officers  Fire Dept., Maintenance	\$ 3,655.00 31,218.00 3,130.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries	PROPERTY \$ 3,655.00 31,218.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries	\$ 3,655.00 31,218.00 3,130.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance	\$ 3,655.00 31,218.00 3,130.00 19,800.00 3,367.00 2,762.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance	\$ 3,655.00 31,218.00 3,130.00 19,800.00 3,367.00 2,762.00 6,000.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance	\$ 3,655.00 31,218.00 3,130.00 19,800.00 3,367.00 2,762.00 6,000.00 2,500.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Forest Warden, Maintenance	\$ 3,655.00 31,218.00 3,130.00 19,800.00 3,367.00 2,762.00 6,000.00 2,500.00 500.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Forest Warden, Maintenance Inspector of Buildings, Salary	\$ 3,655.00 31,218.00 3,130.00 19,800.00 3,367.00 2,762.00 6,000.00 2,500.00 500.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Forest Warden, Maintenance Inspector of Buildings, Salary Inspector of Wires, Salary	\$ 3,655.00 31,218.00 31,30.00 19,800.00 3,367.00 2,762.00 6,000.00 2,500.00 500.00 200.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Forest Warden, Maintenance Inspector of Buildings, Salary Inspector of Wires, Salary Inspector of Wires, Expenses	\$ 3,655.00 31,218.00 3,130.00 19,800.00 3,367.00 2,762.00 6,000.00 2,500.00 500.00 200.00 50.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Tree Warden, Maintenance Inspector of Buildings, Salary Inspector of Wires, Salary Inspector of Wires, Expenses Sealer of W. and M. Salary	\$ 3,655.00 31,218.00 31,30.00 19,800.00 3,367.00 2,762.00 6,000.00 2,500.00 500.00 500.00 500.00 500.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Forest Warden, Maintenance Inspector of Buildings, Salary Inspector of Wires, Salary Inspector of Wires, Expenses	\$ 3,655.00 31,218.00 3,130.00 19,800.00 3,367.00 2,762.00 6,000.00 2,500.00 500.00 200.00 50.00	
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Tree Warden, Maintenance Inspector of Buildings, Salary Inspector of Wires, Salary Inspector of Wires, Expenses Sealer of W. and M. Salary Sealer of W. and M., Expenses	\$ 3,655.00 31,218.00 31,30.00 19,800.00 3,367.00 2,762.00 6,000.00 2,500.00 500.00 500.00 500.00 500.00	,
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Forest Warden, Maintenance Inspector of Buildings, Salary Inspector of Wires, Salary Inspector of Wires, Expenses Sealer of W. and M. Salary Sealer of W. and M. Salary Sealer of W. and M. Expenses  Hydrant Rentals	\$ 3,655.00 31,218.00 31,218.00 3,130.00 19,800.00 2,762.00 6,000.00 2,500.00 500.00 500.00 500.00 225.00	
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Tree Warden, Maintenance Inspector of Buildings, Salary Inspector of Wires, Salary Inspector of Wires, Expenses Sealer of W. and M. Salary Sealer of W. and M., Expenses	\$ 3,655.00 31,218.00 31,218.00 3,130.00 19,800.00 2,762.00 6,000.00 2,500.00 500.00 200.00 500.00 500.00 225.00	
PROTECTION OF PERSONS AND  Police Dept., Maintenance Police Dept., Salaries and Special Officers Fire Dept., Maintenance Fire Dept., Salaries Fire Dept., Call Men Salaries Fire Alarm, Maintenance Moth Dept., Maintenance Tree Warden, Maintenance Forest Warden, Maintenance Inspector of Buildings, Salary Inspector of Wires, Salary Inspector of Wires, Expenses Sealer of W. and M. Salary Sealer of W. and M. Salary Sealer of W. and M. Expenses  Hydrant Rentals	\$ 3,655.00 31,218.00 31,218.00 3,130.00 19,800.00 2,762.00 6,000.00 2,500.00 500.00 500.00 500.00 225.00	

#### HEALTH AND SANITATION

Board of Health, Salaries  Board of Health, Expenses Inspector of Plumbing, Salary Inspector of Animals, Salary Inspector of Milk, Salary Care of Contagious Diseases Garbage Collection	\$	300.00 600.00 800.00 200.00 100.00 2,000.00 2,300.00	\$	6,300.00
HIGHWAYS AND SIDEWA	LK	S		
Highway Dept., Maintenance Sidewalk Construction Snow and Ice Removal Maintenance of Storm Drains Care of Dumps Street Lighting	\$	50,000.00 8,000.00 5,000.00 3,000.00 500.00		66,500.00 12,000.00
CHARITIES AND AID				3
Board of Public Welfare: Visitor's Salary Clerical Salary Aid, Board and Care Mother's Aid Temporary Aid	\$	600.00 352.00 10,000.00 4,000.00 2,500.00	\$	17,452.00
SOLDIERS' BENEFITS		200.04		
State Aid Military Aid Soldiers' Relief	\$	200.00 300.00 6,000.00	\$	6,500.00
EDUCATION				
School Department: General Maintenance General Salaries Agricultural Maintenance Agricultural Salaries Industrial Tuition		55,250.00 79,500.00 300.00 2,800.00 600.00		
Public Library, Maintenance	\$	3,200.00 4,800.00	\$2. \$	38,450.00 8,000.00
RECREATION				
Park Dept., Maintenance			\$	5,000.00

#### CEMETERIES

Laurel Hill Cemetery, Maintenance	\$ 8,900.00 1,250.00		
•		\$ 1	0,150.00
MEMORIAL DAY		, -	-,
		Φ.	600.00
Memorial Day Observance		\$	600.00
OTHER APPROPRIATION	S		
Storm Water Drainage System	\$ 13,289.28		
Child Welfare Work	400.00		
Middlesex County Bu. of Agr	200.00		
Reading Post No. 62 Am. Legion Rent	1,000.00		
Veteran Post No. 194 G. A. R. Rent	360.00		
Care Soldiers' Graves	600.00		
Overdrafts, 1929	82.98		
Town Forest	1,500.00		
Police Station	5,000.00		
Police Station Plans	600.00		
Tercentenary Celebration	3,000.00		
Public Playground Land, Birch Meadow	3,000.00		
Athletic Field Survey	500.00		
Reserve Fund	5,000.00		
Printing Building Laws	400.00		
		\$ 34	,932.26
Total Appropriation from Tax Levy		\$592	,612.26
APPROPRIATIONS NOT FROM TA	AX LEVY		
From Excess & Deficiency Acco			
Reserve Fund		\$ 2	,000.00
Aid, Board and Care			,500.00
Temporary Aid		,	500.00
Soldiers' Relief		1	.200.00
Vocational Tuition		•	450.00
Care Contagious Diseases		1	,300.00
Care Contagious Discases			,500.00
		\$ 9.	950.00
RECAPITULATION		, ,	
	502 (12.2)		
	35,612.26		
State Taxes and Assessments	25,541.91		
County Taxes	24,423.85	\$642	E70 02
01			578.02
Overlay		3,	764.34
	-	\$616	342.36
		DUTU.	JT4.JU

VALUATI	ION	,	APPF	OPRIAT	OI	NS	
1930			Town Purpo	ses	\$	5	92,612.26
Real Estate	\$1-	4,665,950.00	State and Co				
Personal Estate		1,164,475.00	Taxes, Et	c			49,965.76
			Overlay				3,764.34
Total Valuation	\$1.	5,830,425.00			_		
Assessed @ \$31.30		150 0 17 51			\$	6	46,342.36
Real Estate Tax		459,047.51					
Personal Estate		36,448.85	* 11 11				20 000 00
	Φ.	405 406 75	Less Est. R			1	20,000.00
D-11 /T 2022 @ \$2.0	\$	495,496.36 5,846.00	Less M. V.				25,000.00
Poll Tax 2923 @ \$2.0	<i></i>	5,840.00	Tax				25,000.00
	\$	501,342.36			\$	5	01,342.36
STATE AND	COI	UNTY TA	XES. ASSES	SMENTS	s. I	ΞT	C.
20100			30				
0 11 1 1							
Commonwealth of M				¢1.4.040.0	20		
State Tax State Highway T				\$14,840.0 2,035.0			
Fire Prevention				146.			
Municipal Lightin				78.7			
Snow Removal				324.0			
Metropolitan Sev				8,118.0			
County of Middlesex				24,423.8	35		
						\$ 4	49,965. <b>7</b> 6
		TAVE	S 1928				
Balance uncollected J				\$ 1,566.9	93		4 10 - 40
Collected 1930						\$	1,487.38
Abatements							63.30 16.25
Balance to 1931					_		10.25
				\$ 1,566.9	93	\$	1,566.93
		TAVE	. C. 1020	, ,		·	
		IAAL	ES 1929				
Balance uncollected				\$149,219.4	15		
Collected 1930						\$1	46,252.07
Abatements							433.07
Transfers to Tax T							1,602.12
Balance to 1931			• • • • • • • • • • • • •				932.19
				\$149,219.4	45	\$1	49.219.45

#### **TAXES 1930**

Commitments, Collected 1930 Abatements Transfers to Tax Titles Balance to 1931	\$5	01,398.36		18,836.97 897.12 2,892.94 78,771.33
·	\$5	01,398.36	\$5	01,398.36
MOTOR VEHICLE EXCISE TA Balance uncollected Jan. 1, 1930 Collected Abatements Balance to 1931	<b>X</b> \$	<b>1930</b> 8,082.88	\$	6,581.61 304.93 1,196.34
	\$	8,082.88	\$	8,082.88
MOTOR VEHICLES EXCISE T.	'		7	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Commitments Collected Abatements Balance to 1931		25,314.13	\$	18,968.57 1,111.52 5,234.04
	\$	25,314.13	\$	25,314.13
MOTH 1930				
Commitments Collected Balance to 1931	\$	871.25	\$	445.00 426.25
	\$	871.25		871.25
SIDEWALK ASSESSMENT	19	30		
Commitments  Collected  Balance to 1931	\$	770.53	\$	387.24 383.29
	\$	770.53	\$	770.53
SEWER ASSESSMENT UNAPPO	RT	IONED		
Betterments assessed in 1930  Collected  Apportioned  Balance to 1931	\$	2,920.76	\$	322.03 259.35 2,339.38
	\$	2,920.76	\$	2,920.76

#### SEWER ASSESSMENTS

#### Apportionment of 1929

Balance uncollected Jan. 1, 1930	\$	747.56		
Adjustment'		1.27		
Collected		1,	\$	662.30
			Ψ	
Transfer to Tax Titles				5.49
Balance to 1931				81.04
	_		_	
	\$	748.83	\$	748.83
SEWER ASSESSMENTS	,			
Apportionment of 1930				
Commitments	\$	1,654.87		
Collected	Ċ	·	\$	989.80
Transfer to Tax Titles			т.	5.23
				659.84
Balance to 1931				039.04
	\$	1,654.87	\$	1,654.87
INTEREST ON SEWER ASSESS	8//	CNTC		
Balance uncollected Jan. 1, 1930	\$	157.25		
Commitments, 1930		251.14		
Additional Charges		50.41		
Collected		00112	\$	343.26
			Ψ	.25
Transfer to Tax Titles				
Balance to 1931				115.29
	_			
	\$	458.80	\$	458.80
OFWED ACCECUATION				
SEWER ASSESSMENT				
Apportioned Receivable-Deferred Payme	nts	1930 to	193	9
Balance uncollected Jan. 1, 1930	\$	4,207.54		
Assessments 1930		156.97		
Receipts Advanced Payments		200,77	\$	95.93
Committed to Collector			Ψ	1,552.49
Balance Dec. 31, 1930				2,716.09
	-			
	\$	4,364.51	\$	4,364.51
	•	Ť	·	Í
SEWER RENTALS				
Balance uncollected Jan. 1, 1930	\$	227.70		
Charged in 1930		9,083.99		
Collected		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$	8,745.59
			φ	,
Balance to 1931				566.10
	_			
	\$	9,311.69	\$	9,311.69

## CEMETERY LOTS SOLD Deferred Payments

Balance Jan. 1, 1930	\$ 200.00 987.50	\$	787.50 400.00
	\$ 1,187.50	\$	1,187.50
CEMETERY BEQUESTS			
Deferred Payments			
Balance Jan. 1, 1930	\$ 87.50 800.00 25.00		
Receipts		\$	600.00
Balance to 1931			312.50
	\$ 912.50	\$	912.50
OVERLAY 1928			
Balance Jan. 1, 1930	\$ 63.30 414.74 16.25	\$	494.29
	\$ 494.29	\$	494.29
OVERLAY 1929		٠	
Balance Jan. 1, 1930 Refunds Abatements Transfer to Overlay Reserve Balance to 1931	\$ 6.06 433.07 1,111.35 932.19	\$	2,482.67
	\$ 2,482.67	\$	2,482.67
OVERLAY 1930			
Appropriation Refunds Abatements Balance to 1931	\$ 176.85 897.12 2,690.37	\$	3,764.34
	\$ 3,764.34	\$	3,764.34

#### OVERLAY RESERVE FUND

Balance Jan. 1, 1930 Transfer from Overlay, 1928 Transfer from Overlay, 1929 Balance to 1931	\$ 2,476.33	\$ 950.24 414.74 1,111.35
	\$ 2,476.33	\$ 2,476.33
DEPARTMENTAL ACCOUR	NTS	. i
Balance Jan. 1, 1930 Charges Receipts Credits, Etc. Committed to Collector Balance to 1931	\$ 31,217.27 229.53 871.25 9,887.04 \$ 42,205.09	\$ 13,530.80 28,674.29
WATER DEPARTMENT Accounts Receivable	•	``
Dr.  Balance Jan. 1, 1930  Meter Rates, Etc., Charged in 1930  Cr.  Receipts, 1930  Discounts and Adjustments  Balance Dec. 31, 1930	\$ 460.88 57,796.73	\$ 57,237.51 432.17 587.93
	\$ 58,257.61	\$ 58,257.61
MUNICIPAL LIGHT DEPART	MENT	
Accounts Receivable  Dr.  Balance Jan. 1, 1930 Light, Power, Etc., charged 1930  Cr.  Receipts, 1930 Discounts and Adjustments Balance Dec. 31, 1930	\$ 33,684.80 343,023.31	\$319,807.69 23,251.10 33,649.32
	\$376,708.11	\$376,708.11

#### CEMETERY RESERVE FUND

CEMETERI RESERVE FO	DIAT	,		
Cr.				
Balance Jan. 1, 1930			\$	4,684.71
Receipts, Sale Lots and Graves			Ċ	1,402.50
Interest				8.69
Dr.				0.07
Appropriation	\$	2,500.00		
Balance to 1931	Ψ	3,595.90		
Balance to 1701		0,575.70		
,	\$	6,095.90	\$	6.005.00
	Ψ	0,075.70	Ψ	0,075.70
TAX TITLES (HELD BY TO	W	(N		
Dr.				
Outstanding Jan. 1, 1930	\$	8,628.44		
Taxes, Etc., on property taken	Ψ	5,340.76		
Taxes, Etc., on property sold		268.30		
Adjustment		2.00		
Cr.		2.00		
Receipts for redemption			\$	5,583.05
			φ	156.78
Adjustments				
Outstanding Dec. 31, 1930				8,499.67
	<u>_</u>	14 220 50	φ.	14 220 50
	Ф	14,239.50	ф	14,239.50
RESERVE FUND				
Cr.				
Appropriation			\$	7,000.00
Dr.			Ψ	7,000.00
Transfers to Sundry Accounts	\$	4,595.00		
Balance to Revenue	φ	2,405.00		
Datance to Revenue		2,403.00		
	\$	7,000.00	4	7,000.00
	φ	7,000.00	Ф	7,000.00
EXCESS AND DEFICIENCY AC	CO	UNT		
Cr.				
Balance from 1929			\$	22,842.27
Receipts, Redemption of Property			Ψ	5,583.05
Transfers				28,108.92
Commitment				56.00
D.				30.00
Appropriations	\$	9,950.00		
	φ	4,495.06		
To Tax Titles Revenue				
Balance to 1931	2	12,145.18		
·	¢ 1	56 F00 24	φ.	E
	Ф.	56,590.24	Þ	56,590.24

#### APPROPRIATION ACCOUNTS

#### Selectmen's Expenses

Cr.		•		
Appropriation	• •		\$	300.00 50.00
Dr.				30.00
Stationery and Postage	\$	23.62		
Printing and Advertising		156.93		
Telephone All Other		104.38 40.00		
Total Payments	\$	324.93		
Balance to Revenue		25.07		
	\$	350.00	\$	350.00
Selectmen's Clerical				
Cr.			•	1 210 00
Appropriation			\$	1,310.00
Leon G. Bent	\$	1,310.00		
	_	1 210 00	_	1 210 00
Town Accountant's Salary	\$	1,310.00	\$	1,310.00
Cr.	,			
Appropriation			\$	2,000.00
Leon G. Bent	\$	2,000.00		
Leon G. Bent	Φ	2,000.00		
	\$	2,000.00	\$	2,000.00
Treasurer's Salary				
Appropriation			\$	1,200.00
Dr.			φ	1,200.00
Preston F. Nichols	\$	1,200.00		
	\$	1,200.00	\$	1,200.00
Treasurer's Expenses	Φ	1,200.00	φ	1,200.00
Cr.				
Appropriation			\$	600.00
Transfer from Reserve Fund				25.00
Stationery and Postage	\$	177.74		
Certification of Notes		32.00		
Bond		220.00		

Telephone All Other		73.59 120.23		
Total Payments	\$	623.56 1.44		
	\$	625.00	\$	625.00
Tax Collector's Salary				
Cr. Appropriation			\$	2,300.00
Grace V. Viall	\$	2,300.00		
	\$	2,300.00	\$	2,300.00
Tax Collector's Expenses	Ψ	2,000.00	Ψ	2,000.00
Cr. Appropriation Dr.			\$	1,300.00
Stationery and Postage Printing and Advertising Bond Registry of Deeds Telephone All Others	\$	515.88 178.75 440.00 53.77 49.40 8.75		
Total Payments	\$	1,246.55 53.45		
	\$	1,300.00	\$	1,300.00
Tax Collector's Clerical				
Cr. Appropriation			\$	400.00
Various Parties	\$	398.50 1.50		
	\$	400.00	\$	400.00
Board of Assessors' Salarie	s			
Cr.				
Appropriation			\$	1,800.00

Dr. Alvah W. Clark Geo. E. Horrocks J. Fred Richardson	\$	600.00 600.00 600.00 1,800.00	\$	1,800.00
Board of Assessors' Expense	es			
Cr. Appropriation Dr. Assistant Assessors Stationery and Printing Printing Poll List Auto Hire Telephone Transfers Office Equipment All Other Total Payments	\$	324.00 84.02 656.00 90.00 50.55 45.31 52.31 65.08	\$	1,400.00
Balance to Revenue		32.73	\$	1,400.00
Board of Assessors' Cleric	,	1,100.00	Ψ	1,100.00
Cr. Appropriation Dr. Christine F. Atkinson Philomena C. Doucette	\$	1,560.00 1,196.00	\$	2,756.00
	\$	2,756.00	\$	2,756.00
Block System Survey Cr.				
Balance from 1929 Appropriation Dr. Davis & Abbott Balance to 1931	\$	465.37 39.13	\$	4.50 500.00
8	\$	504.50	\$	504.50

#### Town Counsel's Salary

Cr.				500.00
Appropriation			\$	500.00
Melville F. Weston Samuel H. Davis	\$	145.83 354.17		
	\$	500.00	\$	500.00
Town Counsel's Expenses				
Cr.				
Appropriation Transfer from Reserve Fund			\$	100.00
Dr.				10.00
Sundry Expenses		105.29		
Balance to Revenue	_	4.71		
	\$	110.00	\$	110.00
Town Clerk's Salary				
Cr.				
Appropriation			\$	350.00
Millard F. Charles	\$	350.00		
	_	250.00	_	250.00
	\$	350.00	\$	350.00
Town Clerk's Expenses Cr.				
Appropriation			\$	600.00
Dr.				
Canvassing Births Recording, Etc.	\$	65.00 274.50		
Stationery and Postage	•	57.26		
Reporting Returns		33.00		
Bond		8.00 78.63		
Printing		60.80		
All Other		21.75		
Total Payments	\$	598.94		
Balance to Revenue		1.06		
ė ·	\$	600.00	\$	600.00

#### Board of Public Works

Board of Public Works				
Cr.				
Appropriation			\$	6,000.00
			Ψ	0,000.00
Dr. Superintendent's Salary	\$	3,299.92		
Clerical		1,555.00		
Bonds		37.00		
Office Supplies and Equipment		447.20		
Telephone		252.09		
Insurance		33.45		
All Other	_	371.60		
Total Payments		5,996.26		
Balance to Revenue		3.74		
Darance to Revenue	_	3.74	_	
	\$	6,000.00	\$	6,000.00
Miscellaneous Expenses				
Cr.				
Appropriation			\$	2,500.00
Transfer from Reserve Fund				1,100.00
Dr.				
Printing Town Reports	\$	1,264.00		
Stationery and Printing, Accounting Dept	Ψ	296.06		
Old South Clock and Reading Sign, care and		290.00		
lighting		221.43		
Finance Com. Expense		145.00		
Board of Appeal Expense		24.50		
Inspector of Buildings, Expense		7.48		
Clerical		500.75		
Unemployed Pay Roll Account		993.39		
All Other		98.71		
Total Payments	\$	3,551.32		
Balance to Revenue	т	48.68		
Swarce to attribute	_		_	
	\$	3,600.00	\$	3.600.00
Board of Registrars' Salarie	es			
Cr.				
Appropriation			\$	250.00
Dr.			Ψ.	
	ф	60.00		
Walter S. Prentiss	\$	60.00		
Owen McKenney		60.00		
Robert S. Ralston		60.00		

Millard F. Charles, Clerk		70.00		
	\$	250.00	\$	250.00
Election Expenses				
Cr.			Φ.	1 500 00
Appropriation			\$	1,500.00 200.00
Election Officers	\$	959.98		
Rent of Hall		208.00		
Printing		416.00 60.44		
All Other		13.16		
Total Payments	\$	1,656.58		
Balance to Revenue		43.42		
	\$	1,700.00	\$	1,700.00
Municipal Building, Maintena	nce	•		
Cr.			Φ.	2 000 00
Appropriation			\$	3,000.00
Janitor's Services	\$	1,040.00		
Fuel	٠	293.22		
Light		229.60		
Water and Sewer		71.80		
Repairs and Equipment		714.15		
All Other		107.42		
	_			
Total Payments	\$	2,669.37		
Balance to Revenue		330.63		
	\$	3,000.00	\$	3,000.00
Fire Stations, Maintenance	2			
Cr. Appropriation			\$	1,450.00
Dr.			φ	1,430.00
Fuel	\$	469.31		
Light		172.32		
Water and Sewer		105.10		
Repairs All Other		153.15 45.85		
All Other		45.65		

Total Payments Balance to Revenue	\$	945.73 504.27		
	\$	1,450.00	\$	1,450.00
G. A. R. Rooms, Lighting				
Cr.			\$	25.00
Appropriation Dr.			Φ	23.00
Municipal Light Dept.  Balance to Revenue	\$	9.06 15.94		
	\$	25.00	\$	25.00
G. A. R. Rooms, Rent				
Cr.			ď	260.00
Appropriation Dr.			\$	360.00
M. E. Brande	\$	360.00		
	\$	360.00	\$	360.00
Insurance				
Cr.			ch.	£ 750.00
Appropriation Dr.			\$	5,750.00
Various Parties, Premiums  Balance to Revenue	\$	5,629.59 120.41		
	\$	5,750.00	\$	5,750.00
Interest				
Appropriation			•	28,000.00
Dr.			Ψ	20,000.00
Interest on Temp. Loans All Other	\$	9,862.00 16,997.50		
Total Payments	\$	26,859.50		
Balance to Revenue		1,140.50		
	\$ 2	28,000.000	\$	28,000.00
Police Department, Maintena	nc	е		
Appropriation			\$	3,655.00
Transfer from Reserve Fund			Ψ	100.00

Dr. Telephone ..... 183.65 Auto and Motor Cycle Expense ..... 993.91 Chief's Expenses ..... 60.25 Police, Traffic Signals and Street Lines ...... 1,691.46 Printing ..... 29.00 Equipment ..... 407.00 Insurance ..... 244.68 All Other ..... 95.32 Total Payments ..... 3,705.27 Balance to Revenue ..... 49.73 3,755.00 \$ 3,755.00 Police Department, Salaries and Special Officers Cr. \$ 31,218.00 Appropriation ...... Pay Rolls ..... \$ 30,893.07 Balance to Revenue ..... 324.93 \$ 31,218.00 \$ 31,218.00 Fire Department, Maintenance Cr. Appropriation ..... 3.130.00 Dr. Telephones ..... 124.14 Equipment, Repairs and Maintenance ...... 2,899.37 All Other ..... 103.67 3,127.18 Total Payments ..... 2.82 Balance to Revenue ..... 3,130.00 \$ 3,130.00 Fire Department, Salaries Cr. Appropriation ..... \$ 19,800.00 Dr. Pay Rolls ..... \$ 19,800.00

\$ 19,800.00

\$ 19,800.00

### Fire Department, Call Men, Salaries

Cr. Appropriation ..... \$ 3,367.00 Dr. Pay Rolls .... 3,367.00 3,367.00 3,367.00 Fire Alarm, Maintenance Cr. Appropriation ..... 2,762.00 Transfer from Reserve Fund ..... 745.00 Supt. Salary ..... 250.00 Pay Roll ..... 1,558.25 Auto Expense ..... 62.80 Material and Supplies ..... 1.583.71 All Other ..... 29.77 Total Payments ..... 3,484,53 Balance to Revenue ..... 22.47 3,507.00 3,507.00 Forest Warden, Maintenance Cr. Appropriation ...... 500.00 Transfer from Reserve Fund ..... 100.00 Pay Roll ..... 271.00 Supplies ..... 137.82 All Other ..... 123.07 Total Payments ..... 531.89 Balance to Revenue ..... 68.11 600.00 600.00 Moth Department, Maintenance Cr. Appropriation ...... 6,000.00 Transfer from Reserve Fund ..... 15.00 Pay Roll ..... 4.691.90 Telephone ..... 29.55 Auto Expense ..... 272.85 156.00 Rent .....

Material and Supplies Insurance All Other		403.03 397.67 49.46	7	
Total Payments		\$ 6,000.46 14.54		
		\$ 6,015.00	\$	6,015.00
Tree Warden, Main	tenance			
Cr. Appropriation			\$	2,500.00 300.00
Pay Roll		\$ 1,700.00 977.01 119.37		
Total Payments		\$ 2,796.38 3.62		
V 1		\$ 2,800.00	\$	2,800.00
Hydrant Renta	ls			
Cr.			¢.	7 000 00
Appropriation			\$	7,980.00
Water Dept		\$ 7,980.00		
		\$ 7,980.00	\$	7,980.00
Drinking Founta	ins			
Cr. Appropriation			\$	100.00
Water Dept.		\$ 100.00		
		\$ 100.00	\$	100.00
Inspector of Build Cr.	ings			
Appropriation			\$	500.00
A. Russell Barnes		\$ 500.00		
	-	\$ 500.00	\$	500.00

# Inspector of Wires

Inspector	of Wires				
Cr					
Appropriation				\$	200.00
Dr	•				
Hugh L. Eames		\$	200.00		
		\$	200.00	\$	200.00
		т		Ψ	=00.00
Inspector of W	ires, Expense	es			
Cr	•				
Appropriation				\$	50.00
Dr	•				
Material and Supplies		\$	10.85		
Balance to Revenue			39.15		
		\$	50.00	\$	50.00
Sealer of Weight	s and Measu	ree			
		-03			
Annanciation	-			ф	500.00
Appropriation				\$	500.00
Dr	•	Α.	<b>500.00</b>		
Carl M. Smith		\$	500.00		
			f00.00	_	500.00
		\$	500.00	\$	500.00
Sealer of Weights and	Measures, E	Схре	nses		
Cr	•				
Appropriation				\$	225.00
Dr				•	
Auto Expense		\$	170.00		
Insurance		•	13.60		
All Other			37.13		
Total Payments		\$	220.73		
Balance to Revenue		т	4.27		
*					
		\$	225.00	\$	225.00
Board of Hea	lah Calantas	Ψ	220.00	Ψ	
	•				
Cr.					***
Appropriation				\$	300.00
Dr	•				
E. M. Halligan, M. D., Chairman .		\$	75.00		
C. F. Atkinson, Secretary			150.00		
Geo. W. S. Ide			75.00		
				_	
		\$	300.00	\$	300.00

### Board of Health, Expenses

Cr. Appropriation ..... \$ 600.00 Dr Supplies ..... 40.72 Telephone ..... 49.86 Inspection of Slaughtering ..... 199.67 All Other ..... 178.24 Total Payments ..... 468,49 Balance to Revenue ..... 131.51 600.00 \$ 600.00 Inspector of Plumbing Cr. Appropriation ..... \$ 800.00 David Taggart ..... 800.00 \$ 800.00 \$ 800.00 Care of Contagious Diseases Cr. Appropriation ..... 3,300.00 Dr. Hospital Care ..... 2.954.41 Supplies ..... 46.16 Total Payments ..... 3.000.57 299.43 Balance to Revenue ..... 3.300.00 \$ 3,300.00 Garbage Collection Cr. Appropriation ..... 2,300.00 Dr. Jos. Farpelha ..... 2,300.00 \$ 2,300.00 \$ 2,300.00 Inspector of Animals Cr. Appropriation ..... \$ 200.00 Dr. C. H. Playdon, M. D. V. 200.00 \$ 200.00 \$ 200.00

# Inspector of Milk

Inspector of Wilk				
Cr.				
Appropriation			\$	100.00
Dr.				
Carl M. Smith	\$	100.00		
	Ψ	100.00		
	\$	100.00	\$	100.00
	Ψ	100.00	Ψ	100.00
SEWER DEPARTMENT	•			
Construction and Maintenan	ce			
Cr.				
Balance from 1929			φ.	12,363.60
Transfer from House Conn. Acc't				11,278.40
				237.53
Dr.				
Pay Roll	\$	7,983.12		
Bonds		9,000.00		
Equipment and Supplies		2,335.67		
Repairs		141.35		
Auto Expense		156.96		
Insurance		341.35		
All Other		337.46		
Total Payments	\$	20,295.91		
Balance to 1931		3,583.62		
			_	
	\$	23,879.53	\$	23,879.53
		,		,
SEWER DEPARTMENT				
House Connections				
Cr.				
Balance from 1929			\$	200.00
Receipts, Guarantee Deposits			·	2,167.41
Dr.				
Pay Roll	\$	1,132.62		
Equipment and Supplies	Ψ	398.55		
Refunds on Deposits		398.71		
Retunds on Deposits		070.71		
Total Payments	\$	1,929.88		
Transfer to Maintenance Account	Ψ	237.53		
		200.00		
Balance to 1931		200.00		
	\$	2,367.41	\$	2,367.41
	Ф	2,307.41	Φ	2,507.41

# Highway Department

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Maintenance Storm Drains	5			11
Cr. Appropriation			\$	3,000.00
Pay Roll	\$	2,073.86 339.05		
Total Payments	\$	2,412.91 587.09		0.0 4.54
And the second s	\$	3,000.00	\$	3,000.00
Drainage System				
Balance from 1929 Appropriation Dr. Pay Roll	\$	6,559.05	\$.	1,710.72 13,289.28
Tools and Supplies Pipe	Ψ -	2,623.29 5,661.47		
Total Payments Balance to 1931	\$	14,843.81 156.19		
	\$	15,000.00	\$	15,000.00
Salem Street Construction				
Cr. Transferred from Highway Appropriation Received from Comm. of Massachusetts Received from County of Middlesex Dr.			\$	2,956.66 2,956.66 2,956.66
Pay Roll Road Material All Other	\$	2,957.55 4,598.78 1,313.65		A
Total Payments	\$	8,869.98	\$	8,869.98
Care of Dumps				. 4
Appropriation Cr.  Dr.			\$	500.00
Pay Roll Anchor Fence Co.	\$	149.41 343.00		
Total Payments	\$	492.41		

Balance to Revenue		7.59		
	\$	500.00	\$	500.00
Street Lighting	Ψ	000.00	Ψ	000.00
Cr.				
Appropriation			\$	12,000.00
Municipal Light Dept.	\$	12,000.00		
	\$	12,000.00	\$	12,000.00
Board of Public Welfare		,	т	,
Clerical				
Cr.				
Appropriation			\$	352.00
Leon G. Bent	\$	352.00		
geon of Dent	Ψ —		_	
	\$	352.00	\$	352.00
Board of Public Welfare Visitor				
Cr.				
Appropriation			\$	600.00
Helen A. Brown	\$	600.00		
	_		_	
	\$	600.00	\$	600.00
Board of Public Welfare Aid, Board and Care				
Cr.				
Appropriation			\$	14,500.00 662.90
Receipts, Hospital Fund				002.90
Cash and Board	\$	7,387.01		
Rent		781.25		
Fuel and Groceries  Hospital and Medical		2,354.24 1,276.66		
Comm. of Mass., Other Cities and Towns		2,474.02		
All Other		353.21		
Total Payments	<u></u>	14,626.39		
Balance to Revenue	φ	536.51		
Total Payments	.\$	15,162.90	\$	15,162.90

# Mothers' Aid

Cr.

Cr.			_	4 000 00
Appropriation			\$	4,000.00
Transfer from Reserve Fund				100.00
Dr.				
Cash	\$	3,171.00		
Fuel and Groceries	1	515.63		
Medical		173.30		
Rent		210.00		
	_			
Total Payments	\$	4,069.93		
Balance to Revenue		30.07		
	_		_	
	\$	4,100.00	\$	4,100.00
	4	1,200,00	Ψ	1,200100
Temporary Aid				
Cr.				
Appropriation			\$	3,000.00
Transfer from Reserve Fund			Ψ	250.00
Transfer from Reserve Fund				230.00
Dr.				
Cash	\$	1,459.00		
Rent		300.00		
Fuel and Groceries		1,240.40		
Medical		191.70		
All Other		43.91		
All Other		43.91		
TO A 1 TO	φ.	2 225 01		
Total Payments	\$	3,235.01		
Balance to Revenue		14.99		
	_			
	\$	3,250.00	\$	3,250.00
O				
State Aid				
Cr.				
Appropriation			\$	200.00
Dr.				
Cash Payments:				
Acct. Civil War	\$	72.00		
Acct. Philippine Service		36.00		
	_			
Total Payments	\$	108.00		
Balance to Revenue		92.00		
	_			
	\$	200.00	\$	200.00
	φ	200.00	φ	200.00

# Military Aid Cr.

Cr.				
Appropriation			\$	300.00
Dr.				
Cash Payments:				
Acct. World War	\$	5.00		
Balance to Revenue		295.00		
	_		_	
	:	300.00	\$	300.00
	,	500.00	Ψ	500.00
Soldiers' Relief				•
Cr.				Land
Appropriation			\$	7,200.00
Transfer from Reserve Fund				1,200.00
Dr.				
Cash Payments:				
Acct. Civil War	\$	972.00		
Acct. Spanish War		560.00		
Acct. Philippine Service		624.00		
Acct. World War		4,701.00		
Rent, Acct. World War		200.00		
Fuel, Groceries, Acct. World War		986.96		
				,
Medical and Hospital, Acct. World War		45.50		
Other Cities and Towns		122.25		
All Other		165.45		
	_			
Total Payments	\$	8,377.16		
Balance to Revenue		22.84		
			_	
	\$	8,400.00	\$	8,400.00
SCHOOL DEPARTMENT	Γ			
General Salaries				
Cr.				
Appropriation			<b>Q1</b>	79,500.00
Dr.			φι	79,500.00
	Ф1	57,759.47		
Pay Roll, Supt. Tea. and Clerical	ф1			
Medical Inspection		1,000.00		
School Nurses		3,187.00		
Attendance Officer		500.00		
Janitors		15,813.00		
	_			
Total Payments	\$1	78,259.47		
Balance to Revenue		1,240.53		
	\$1	79,500.00	\$1:	79,500.00

# General Maintenance

Appropriation			\$	55,250.00
Dr.			T	,
Transportation Tuition Books Supplies for Pupils Apparatus for Teaching Administrative Expense Fuel Gas and Electricity Water and Sewer Janitor Supplies Repairs Ashes and Trucking  Total Payments Balance to Revenue		6,599.00 52.00 5,475.94 7,441.00 774.64 4,224.51 6,930.88 2,427.79 1,512.95 1,988.42 11,981.91 551.81 49,932.63 5,317.37		
	\$	55,250.00	\$	55,250.00
A 1 1 1 1 D	·	•	т	,
Agricultural Department, Mai	ntena	nce		
Appropriation			\$	300.00
	•		φ	300.00
Books, etc	. \$	261.33		
Balance to Revenue		38.67		
	\$	300.00	\$	300.00
Agricultural Department, S.	alarie	s		
Cr.				
Appropriation			\$	2,800.00
Pay Roll		2,696.64 103.36		
		0.000.00	4	2 000 00
	\$	2,800.00	\$	2,800.00
Vocational Tuition	\$	2,800.00	\$	2,000.00
Vocational Tuition Cr.	\$	2,800.00	\$	1,050.00

Dr.			
City of Boston City of Somerville Town of Wakefield	\$	583.82 404.52 51.87	
Total Payments Balance to Revenue	\$	1,040.21 9.79	
	\$	1,050.00	\$ 1,050.00
Public Library Maintenance	е		
Appropriation  Dr.  Books, Periodicals and Binding  Printing and Stationery  Fuel, Light, Water and Sewer	\$	2,188.97 135.71 271.05	\$ 3,200.00
Repairs and Furnishings Telephone All Other Expenses		312.02 40.57 200.77	
Total Payments	\$	3,149.09 50.91	-
	\$	3,200.00	\$ 3,200.00
Public Library, Salaries			
Cr. Appropriation			\$ 4,800.00
Bertha L. Brown, Librarian	\$	1,500.00 1,100.00 1,257.15 780.00	
Total Payments	\$	4,637.15 162.85	
	\$	4,800.00	\$ 4,800.00
PARK DEPARTMENT			
Maintenance			
Cr. Appropriation			\$ 5,000.00

Dr.

Dr.				
Pay Roll	\$	2,271.87		
Telephone		8.02		
Repairs		382.76		
Supplies		476.48		
Insurance		80.58		
All Other		1,773.38		
		1,770.00		
Total Payments	\$	4,993.09		
Balance to Revenue	T	6.91		
Salarice to revenue	_	0.71		
	\$	5,000.00	\$	5,000.00
CEMETERY DEPARTMENT	NT			
Laurel Hill Cemetery				
Cr.				
Appropriation from Tax Levy			\$	8,900.00
Appropriation from Cemetery Reserve Fund			Ψ	2,500.00
Transfer from Cemetery Bequest Fund				1,645.97
Transfer from Geo, F. Buck Fund				
				6.48
Dr.				
Pay Roll	\$	9,388.81		
Telephone		92.34		
Material and Supplies		959.02		
Equipment and Repairs		2,036.21		
Auto Expense		160.34		
Insurance		264.50		
All Other		143.42		
All Other		143.44		
Total Payments	\$	13,044.64		
Balance to Revenue	Ψ	7.81		
Datanee to revenue		7.01	_	
	\$	13,052.45	\$	13,052.45
Forest Glen Cemetery				
Cr.				
Appropriation			\$	1,250.00
Dr.			φ	1,230.00
Pay Roll	\$	439.65		
Wall Construction		614.38		
Planting Shrubs		144.95		
All Other		51.00		
ZIII Other	-	31.00		

Total Payments	\$	1,249.98		
	\$	1,250.00	\$	1,250.00
Care of Soldiers' Graves Cr.				
Appropriation			\$	600.00
Dr.	Φ.	161.00		
Pay Roll Material, etc.	\$	464.00 136.00		
Material, etc.	_	130.00	_	
	\$	600.00	\$	600.00
WATER DEPARTMENT	•			
Cr.				
Balance from 1929			\$	16,806.97
Receipts, 1930				57,237.51
Pay Roll	ф	20,142.65		
Clerical	φ	988.00		
Bonds		10,000.00		
Interest on Bonds		2,582.50		
Telephones		223.02		
Insurance		771.17		
Office Supplies and Printing		528.64		
Fuel		2,522.36		
Power		3,165.23		
Supplies		13,827.57		
Tools and Equipment		1,306.29		
Repairs		416.49		
Auto Equipment and Repairs		378.17 8,514.90		
All Other		7,387.23		
Till Other	_	7,007.20		
Total Payments	\$	72,754.22		
Balance to 1931		1,290.26		
	\$	74,044.48	\$ :	74,044.48
WATER MAINS, EXTENSION				
Cr.				
Balance from 1929			\$	1,222.58
Dr.				
Pay Roll	\$	1,222.58		
	\$	1 222 50	\$	1 222 50
	φ	1,222.58	φ	1,222.58

# WATER DEPARTMENT New Stand Pipe

Cr.

Appropriation Bond Issue Premium Accrued Interest Dr.		\$ 35,000.00 231.00 58.33
Pay Roll	\$ 555.97 29,357.86	
Total Payments Balance to 1931	\$ 29,913.83 5,375.50	
	\$ 35,289.33	\$ 35,289.33
MUNICIPAL LIGHT DEPART	MENT	
Cr.		
Receipts, Meter Rates, etc.		\$319,807.69
Dr.		
Pay Roll	\$ 88,746.91	
Bonds and Notes	12,800.0ບ	
Interest on Bonds and Notes	3,266.00	
Office and Salesroom Expenses	5,558.55	
Current purchases	78,151.07	
Maintenance and Operation of Lines	43,977.15	
Insurance	5,391.74	
Coal	4,512.60	
Rent	1,990.21	
Additions to plant	38,612.67	
All Other Payments	30,096.66	
*/*	¢200 241 41	
*Total Payments	\$308,341.41 5,252.73	
Balance to 1931	1,451.40	
,	\$319,807.69	\$319,807.69
*For List of Unpaid Bills see Mun. Light Dept.	Report.	
Construction Account		
Cr.		
Appropriation, Bond Issue		\$ 15,000.00
Premium		99.00
Accrued Interest		25.00

Pay Rolls	\$	1,498.97 8,515.91		
Total Payments Balance to 1931		10,014.88 5,109.12		
		15,124.00	\$	15,124.00
JUNIOR HIGH SCHOOL BUIL Construction and Equipme		ING		
Balance from 1929			\$	101.66
Dr. Balance to 1931	\$	101.66		
	_		_	
MEMORIAL DAY OBSERVA	S NO	101.66 CE	\$	101.66
Cr.				
Appropriation			\$	600.00
Band Hire Flowers Printing All Other	\$	165.00 194.25 19.00 187.94		
Total Payments	\$	566.19 33.81		
	\$	600.00	\$	600.00
Child Welfare Work				
Appropriation Cr.  Dr.			\$	400.00
Mrs. Bertha Benjamin	\$	200.00		
	\$	400.00	\$	400.00
Middlesex County, Aid to Agric Cr.	ultı	ire		
Appropriation			\$	200.00
Dr. Agricultural Extension Service	\$	200.00		
,	\$	200.00	\$	200.00

Planning Board Expenses Cr. Appropriation ..... \$ 350.00 Dr. Mass. Fed. of Planning Boards ..... \$ 15.00 Dallinger & Stearns ..... 50.00 All Other ..... 55.32 Total Payments .....\$ 120.32 Balance to Revenue ..... 229.68 350.00 \$ 350.00 SMITH-HUGHES FUND Cr. Balance from 1929 ..... \$ 176.68 185.70 Receipts. 1930 ..... Pay Roll Agr. School Dept. ..... \$ 176.68 Balance to 1931 ..... 185.70 362.38 \$ 362.38 GEORGE REED FUND Cr. Received, 1930 ..... \$ 20.17 Dr. Balance to 1931 ..... \$ 20.17 20.17 \$ 20.17 WORLD WAR MEMORIAL Cr. Balance from 1929 ..... \$ 4,069.82 \$ 4,069.82 \$ 4,069.82. DRAINAGE SYSTEM SURVEY Cr. Balance from 1929 ..... \$ 1,000.00 Pay Rolls ..... \$ 687.49 Balance to 1931 ..... 312.51

\$ 1,000.00 \$ 1,000.00

# OVERDRAFT 1929

Cr.				
Appropriation			\$	82.98
PaymentsDr.	. \$	82,98		
	\$	82.98	\$	82.98
Rent, Post 62, Am. Leg	ion			
Cr.				
Appropriation			\$	1,000.00
Dr.		4 000 00		
Reading Veterans' Association	. \$	1,000.00		
	\$	1,000.00	\$	1,000.00
PUBLIC PLAY GROUND, BIRCI	н м	EADOW		
Cr.				
Appropriation			\$	3,000.00
Pay Rolls	. \$	484.99		
Land Purchase		450.00		
Surveying		162.25		
Steam Shovel		748.75		
Recording Deeds		255.00		
Supplies		421.12		
Total Payments	. \$	2,522.11		
Transfer to Special Account		100.00		
Balance to 1931		377.89		
	\$	3,000.00	\$	3,000.00
AMERICAN LEGION ENTERT	AIN	MENT		
Cr.				
Appropriation from Reserve Fund	•		\$	300.00
National Convention Corp	. \$	45.00		
Entertaining		222.09		
All Others		32.91		
	\$	300.00	\$	300.00
BUILDING LAWS EXPEN	'		,	
Cr.				
Appropriation			\$	400.00

Dr. Clerical work Stationery Balance to 1931	\$	32.75 .80 366.45		
	\$	400.00	\$	400.00
TERCENTENARY OBSERVA	NC	CE		
Cr.				2 200 00
Appropriation			\$	3,000.00
Pageant Printing All Others	\$	2,356.80 344.25 197.55		
Total Payments	\$	2,898.60 101.40		
	\$	3,000.00	\$	3,000.00
ATHLETIC FIELD SURVI	E.Y			
Cr.				
Appropriation			\$	500.00
Dr. Davis & Abbott Balance to 1931	\$	8.00 492.00		
	\$	500.00	\$	500.00
POLICE BUILDING CAR	r	000.00	Ψ	000.00
Cr.				
Appropriation from E. & D. Acct			\$	100.00
Pay Roll Fuel Balance to Revenue	\$	1.50 31.63 66.87		
	\$	100.00	\$	100.00

# Cr. \$ 1,500.00 Dr.

TOWN FOREST

 Pay Roll
 \$ 1,048.00

 Legal Service
 125.00

Davis & Abbott All Others		260.0 63.9	
Total Payments		\$ 1,496.9	
		\$ 1,500.00	\$ 1,500.00
POLICE BUILDIN	NG		
Appropriation	• • • •		\$ 50,000.00 11.36
Central Eng. & Constr. Co Advertising Architects Fees		\$ 34,353.09 91.88 2,907.42	
Sewer Deposit Insurance All Others		57.00 307.50 3,477.58	
Total Payments	,	8,816.89	
	\$	50,011.36	\$ 50,011.36
ACCOUNTING MUNICIPAL			·
Temporary Loans, Anticipation Outstanding Jan. 1, 1930		evenue	\$150,000.00
Notes Issued in 193			φ.ευ,ουσ.συ
Mar. F. S. Moseley & Co.  May First Nat'l., Old Colony Corp'n.  July First Nat'l., Old Colony Corp'n.  2.	.02 1 .32 1	Amount 75,000.00 150,000.00 00,000.00 200,000.00	
110v. Second Wat I. Dank, Doston 2.	.50 2		\$525,000.00
N			\$675,000.00
May June Nov. Dec.	2	00,000.00 50,000.00 25,000.00 00,000.00	
0			\$475,000.00
Outstanding Dec. 31, 1930			\$200,000.00

WATER DEPARTMENT LOANS	
Outstanding Jan. 1, 1930 \$ 50,000.00	
Bonds issued in 1930	<b>*</b> **********
Paid in 1930	\$ 10,000.00
Outstanding Dec. 31, 1930	75,000.00
\$ 85,000.00	\$ 85,000.00
MUNICIPAL LIGHT DEPARTMENT LOANS	
Outstanding Jan. 1, 1930 \$ 67,300.00	
Bonds issued in 1930	<b>4. 13</b> 000 00
Paid in 1930	\$ 12,800.00 69,500.00
Outstanding Dec. 31, 1930	09,500.00
\$ 82,300.00	\$ 82,300.00
SEWER DEPARTMENT LOANS	
Outstanding Jan. 1, 1930	<b>A</b> 0.000.00
Paid in 1930	\$ 9,000.00
Outstanding Dec. 31, 1930	134,000.00
\$143,000.00	\$143,000.00
MUNICIPAL BUILDING LOANS	
Outstanding Jan. 1, 1930 \$ 16,000.00	
Paid in 1930	\$ 2,000.00
Outstanding Dec. 31, 1930	14,000.00
\$ 16,000.00	\$ 16,000.00
MUNICIPAL AND LIBRARY BUILDING GROUN	
Outstanding Jan. 1, 1930	
Paid in 1930	\$ 500.00
Outstanding Dec. 31, 1930	\$ 1,000.00
·	
\$ 1,500.00	\$ 1,500.00
BROWN ESTATE LOANS	
Outstanding Jan. 1, 1930	* 500.00
Paid in 1930	\$ 500.00
Outstanding Dec. 31, 1930	1,000.00
\$ 1,500.00	\$ 1,500.00
SCHOOL BUILDING LOANS	
Outstanding Jan. 1, 1930	
Paid in 1930	\$ 35,000.00
Outstanding Dec. 31, 1930	195,000.00
\$230,000.00	\$230,000.00
POLICE STATION LOANS	
Bonds issued in 1930 \$ 45,000.00	

Outstanding Dec. 31, 1930		\$ 45,000.00
	\$ 45,000.00	\$ 45,000.00
FUNDED DEBT, BALANCING AC	COUNT	
	\$509,300.00	
Water Dept. Bonds issued 1930	35,000.00	
Mun. Lt. Dept. Bonds issued 1930	15,000.00	
Police Building Bonds issued 1930	45,000.00	
Paid in 1930	45,000.00	
Water Dept. Loans		\$ 10,000.00
Mun. Lt. Dept. Loans		12,800.00
Sewer Dept. Loans		9,000.00
Mun. Building Loans		2,000.00
Mun. Bldg, and Library Loans		500.00
Brown Estate Loans		500.00
School Buildings Loans		35,000.00
School Buildings Loans		33,000.00
Total Payments		\$ 69,800.00
Total Debt Dec. 31, 1930		534,500.00
Total Debt Dec. 31, 1930		
	\$604,300.00	\$604,300.00
FUNDED DEBT MATURING II	N 1930	
Appropriation		\$ 38,000.00
Transfer from Water Dept		10,000.00
Transfer from Light Dept.		12,800.00
Transfer from Sewer Dept		9,000.00
Payment of Loans due in 1930:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
•	\$ 9,000.00	
-	10,000.00	
Water Dept.	12,800.00	
Municipal Light Dept.		
Municipal Building	2,000.00	
Brown Estate	500.00	
Municipal Building and Library	500.00	
School Buildings	35,000.00	
	\$ 69,800.00	\$ 69,800.00
CHARGE DEPT MATHRING I		φ 02,000.00
FUNDED DEBT MATURING I Sewer Dept. Loans	14 1551	\$ 9,000.00
		8,000.00
Water Dept. Loans		13,000.00
Light Dept. Loans		2,000.00
Municipal Building Loans		500.00
Municipal and Library Building Loans		500.00
Brown Estate Loans		
School Building Loans		35,000.00
Police Building Loan		5,000.00
		\$ 73,000.00

# DETAIL OF PAYMENT BY YEARS

<b>s</b> lstoT	73,000.00	72,000.00	68,000.00	66,000.00	65,000.00	49,000.00	22,500.00	20,500.00	20,500.00	14,000.00	11,000.00	11,000.00	9,000.00	9,000.00	8,000.00	6,000.00	6,000.00	2,000.00	2,000.00	\$534,500.00	
Lib. and Mun. Bldg. Grounds	500.00	500.00	:	:	:	:			:			:	:	:	:	:	:		:	\$1,000.00	
Brown Lot	500.00	500.00	:			:	:		:			:			:	:				\$1,000.00	
School Buildings	35,000.00	34,000.00	34,000.00	34,000.00	34,000.00	24,000.00													•	\$195,000.00	i de
Mun. Bidg.	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00							•					•	\$14,000.00	
Police Reation	\$ 5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	:		:	:			:		:	:	\$45,000.00	of a plant of the
Mun. Light Dept.	\$13,000.00	13,000.00	10,000.00	8,000.00	8,000.00	5,000.00	3,500.00	3,500.00	3,500.00	2,000.00	•	:	:	:	:		:	:	:	\$69,500.00	
Water Dept.	\$ 8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	5,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	2,000.00	2,000.00	2,000.00	:	:		:	\$75,000.00	7
Sewer Dept.	\$ 9,000.00	9,000.00	9,000.00	9,000.00	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	7,000.00	7,000.00	7,000.00	7,000.00	6,000.00	6,000.00	6,000.00	2,000.00	2,000.00	\$134,000.00	
Хеаг	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	Totals	

# BORROWING CAPACITY

	Bonnown	ic chi hoi	• •			
	Total Valuation	Abatement V	aluation 1	Net Valuation		
1928	\$15,040,325.00	\$ 91,461	.00	\$14,948,864.00		
1929	15,231,219.00	52,757		15.178,462.00		
1930	15,830,425.00	32,267		15,798,158.00		
1929 Excise	1,017,730.00	104,925		912,805.00		
1930 Excise	1,061,090.00	50,271		1,010,819.00		
Net valuation for	, ,	00,271	.00	48,180,789.00		
	on for three years			16,060,263.00		
3% of average v				481,807.89		
Total Funded D			\$534,500.0			
Less Exempted			φ304,300.0	v		
(Outsi	de Debt Limit)					
Water Dept		. \$ 75,000.00	)			
Mun, Lt. De	ept	. 69,500.00				
			)			
School Bldg	ç	. 43,000.00	\$321,500.0	0 \$213,000.00		
	,					
Borrowing Capa	acity, December 31,	1930		\$268,807.89		
•	ACCOUNTING	TRUST FU	NDS			
	Balancin	g Account				
Cemetery Beque Interest and Inc Adjustment Transferred for Payments for He Transferred for Reducing securi Transferred for Adjustments	Hospital Care care of endowed care Scholarships	eemetery lots	\$213,082.3 2,465.0 10,102.9 25.7	0 4		
			\$225,675.96	\$225,675.96		
	CEMETERY B	EQUEST FU	JND			
	C	r.				
Balance Ian. 1	1930			\$ 50,604.04		
				2,465.00		

2,430.96

Interest and Income 1930 .....

Dr.

Transferred for care of lots	\$	1,645.97 125.00 53,729.03		
	\$	55,500.00	\$	55,500.00
HOSPITAL FUND				
Cr.				
Balance Jan. 1, 1930			\$	157,049.73 7,415.91 25.71
Transferred for Hospital care Reducing securities Adjustment Balance Dec. 31, 1930	\$	4,454.53 2,578.00 34.30 .57,424.52		
	\$1	64,491.35	\$1	64,491.35
GEORGE F. BUCK FUN	)			
Cr.				
Balance Jan. 1, 1930			\$	40.68 1.94
Balance Dec. 31, 1930	\$	42.62		
	\$	42.62	\$	42.62
READING HIGH SCHOOL SCHOLAR	RSI	HIP FUN	ND	
Cr. Balance Jan. 1, 1930 Interest, 1930			\$	5,387.86 254.13
Transferred for Scholarships	\$	250.00 5,391.99		
	\$	5,641.99	\$	5,641.99

# STATEMENT OF INVESTED FUNDS

# Cemetery Bequest Fund

Balance Dec. 31, 1930			\$	53,729.03
Investments Listed at Par: 12,000 U. S. Liberty Bonds, 4th 41/4's, 1933- 1938	\$	12,000.00		
5,000 N. E. Tel. Tel. 1st Mort., 5's Series A 1952		5,000.00		
5,000 No. Pac. Ry. Ref. & Imp., 6's Series B 2047		5,000.00		
4,000 N. Y. C. R. R. Ref. Imp., 5's Series C. 2013		4,000.00		
Blackstone Savings Bank		5,060.00		
Boston Five Cent Savings Bank		2,858.13		
Andover Savings Bank		3,565.98		
Cambridge Savings Bank		3,479.04		
Essex Savings Bank, Lawrence		3,565.98		
Mech. Savings Bank, Reading		8,662.65		
Mech. Savings Bank, Reading		537.25		
		53,729.03		53,729.03
READING HIGH SCHOOL SCHOLAR	RS!	HIP FUN	1D	
Balance Dec. 31, 1930			\$	5,391.99
Andover Savings Bank Charlestown Five Cent Savings Bank Essex Savings Bank, Lawrence First Nat'l Bank, Reading, Sav. Dept.	\$	1,000.00 1,000.00 1,000.00 2,391.99		)
	\$	5,391.99	\$	5,391.99
GEORGE F. BUCK FUND	)			
Balance Dec. 31, 1930			\$	42.62
Investment:				
Mechanics Savings Bank	\$	42.62		
	\$	42.62	\$	42.62

# HOSPITAL FUND

Balance Dec. 31, 1930		\$157,424.52
Investments, Securities listed at Par or Less: \$5,000 Am. Tel.—Tel. Col. Tr. 5's, 1946	\$ 5,000.00	)
\$5,000 Bos. & Albany R. R. Imp. of 1908 4's, 1933	4,798.00	)
\$5,000 Boston Elevated, 5's, 1937	5,000.00	
\$5,000 Cent. Hudson Gas and Elec. 5's 1957	5,000.00	)
\$5,000 Chicago B. & Q. R. R. Co., Ill., Div. "M" 3½'s 1949	4,347.50	
\$2,000 Conn. Lt. & Power Co., 1st Ref. S. F. 7's 1951	2,000.00	)
\$5,000 Conn. Lt. & Power Co., 1st Ref. S F. 4½'s 1956	4,787.50	)
\$5,000 Consumers' Power Co., 5's 1936	5,000.00	)
\$5,000 Consumers' Power Co. 4½'s, 1958	5,000.00	)
\$5,000 Consolidated Gas of Baltimore Gen. M. 4½'s, 1954	4,922.50	)
\$5,000 III. Cent. R. R. Co., Tr. 4's, 1952	4,437.50	)
\$5,000 III. Cent. R. R. Co., St. Louis Div. 1st M 3's, 1951	3,800.00	)
\$5,000 Kansas City Power & Lt. 4½'s, 1957	4,800.00	)
\$5,000 East N. J. Power Co. 1st Mort. 5's, 1959	5,000.0	0
\$5,000 Kings Co. Elec. Lt. & Power 5's 1937	5,000.00	)
\$5,000 N. Y. Cent. & H. R. R. Deb. 4's, 1934	4,737.50	)
\$5,000 N. Y. Tel. Co. 1st Gen. M. 4½'s 1939	4,950.00	)
\$5,000 Old Colony R. R. 1st 5's, 1945	5,000.00	)
\$5,000 Pacific Gas & Elec. 4½'s, 1957	4,875.00	)
\$5,000 St. Paul, Minn. & Man. Ry. 4's, 1933	4,831.2	5
\$5,000 Penn. R. R. Co. Gen'l Mort. 4½'s,1965	4,753.7	5
\$5,000 Wisconsin Power & Light 5's, 1956	5,000.0	0

American Mfg. Co. Common 72 shares	7,200.00	
Home Bleachery & Dye Works, Pfd. 2 Shares	11.00	
Sharp Mfg. Co. Pfd. 55 Shares	1.00	
Sharp Mfg. Co. Com. 20 Shares	1.00	
Andover Savings Bank	5,943.38	
Charlestown Five Cent Savings Bank	5,943.40	
Essex Savings Bank, Lawrence	5,943.38	
Mechanics Savings Bank, Reading	14,759.17	
First Nat'l Bank, Reading, Savings Dept.	14,581.69	
	¢157.424.52	¢1 57 424 51

\$157,424.52 \$157,424.52

I hereby certify that, in accordance with the provisions of Section 53, Chapter 41, of the General Laws, I have audited the accounts of the Commissioners of Trust Funds, have examined the securities and verified bank balances and report the foregoing to be a true and accurate statement, December 31, 1930.

LEON G. BENT, Town Accountant.

# BALANCE SHEET DECEMBER 31, 1930

\$200,000.00	\$ 3,638.81 \$ 2,476.33 6,430.38 426.25	383.29	3,195.55 2,716.09 566.10	9,887.04	33,649.32
16.25 932.19 2,690.37			٠		
4c : 8 : : :	: 1e :	ts  n-		 e-	: 0 : 5 :
Temporary Loans, Anticipation of Revenue Overlays Reserved for Abatements For Taxes of 1928 For Taxes of 1929 For Taxes of 1930	Overlay Reserve Fund	Sidewalk and Curbing Assessments Revenue	Sewer Assessments Apportioned 1931-1939, Revenue	Departmental Accounts Receivable Revenue	ceivable Revenue
\$ 90,838.69				\$193,437.43 \$ 9,887.04	587.93 33,649.32 100.00
\$ 16.25 932.19 178,771.33 1,196.34	383.29 81.04	659.84 14.57 100.72	2,339.38 2,716.09 566.10		
Cash in Banks and Office  Taxes, 1928  Taxes, 1929  Taxes, 1930  Motor Vehicle Excise Tax, 1929  Motor Vehicle Excise Tax, 1929	Moth Assessments, 1930 Sidewalk and Curbing Assessments, 1930 Sower Assessments, 1929	Sewer Assessments, 1930 Sewer Interest, 1929 Sewer Interest, 1930	tioned to 1939 to 1931 to 1939 to Sewer Rentals to 1930 to 1939 to 193	Departmental Accounts Receivable	Water Department Accounts Receivable

# BALANCE SHEET DECEMBER 3 1, 1930

Municipal Light Department, Advancipal Light Department, Advanced by Treasurer 15.00 tenance Account 15.00 sewer Department, Conscription Account 15.00 tenance Account 15.00 te					•
13,978.19 Mun 15.00 8,499.67 Mun 400.00 Sew 312.50 Sew 25.71 Cerr Geo Geo Cerr App	Municipal Light Department Cash	250.00	Water Department, New Stand Pipe		
13,978.19 Mun 15.00 8,499.67 Mun 400.00 Sew 25.71 Cem Smi Geo Cem App	Municipal Light Department, Ad-		Account		5,375.50
15.00 8,499.67 Mun 400.00 Sew 25.71 Cem Smi Geo Cem App	vanced by Treasurer	13,978.19	Municipal Light Department, Main-		
8,499.67 Mur 400.00 Sew 312.50 Sew 25.71 Cem Smi Geo Cem App	Public Library Cash	15.00	tenance Account		1,451.40
400.00 Sew 312.50 Sew 25.71 Cerr Smi Geo Cerr App	Tax Titles Held by Town	8,499.67	Municipal Light Department, Con-		
400.00 Sew 312.50 Sew 25.71 Cerr Smi Geo Geo	Cemetery Lots, Sales, Deferred		struction Account		5,109.12
312.50 Sew 25.71 Cerr Smi Geo Cerr App	Payments	400.00	Sewer Department Maintenance		
312.50 Sew 25.71 Cerr Smi Geo Geo Cerr	Cemetery Bequests, Deferred Pay-		and Construction Account		3,527.79
Smi Seo Geo Geo Cem	ments	312.50	Sewer Department, House Connec-		
Cemetery Lots, Sales and Bequest. Receivable Revenue  Smith-Hughes Fund  George Reed Fund  Cemetery Reserve Fund  Appropriation Balances forward to Junior High School Building .  World War Memorial  Land Damages  World War Memorial  Land Damages  Athletic Field Survey  Drainage System Construction Drainage System Construction Drainage System Survey  Birch Meadow Development  Birch Meadow Special Account Police Building  Block System Survey	Hospital Fund Transfer Account	25.71	tion Account		200.00
Receivable Revenue Smith-Hughes Fund George Reed Fund Cemetery Reserve Fund Appropriation Balances forward to Junior High School Building. World War Memorial Land Damages Building Laws Committee Expenses Athletic Field Survey Drainage System Construction Drainage System Survey Birch Meadow Development Birch Meadow Special Account Police Building Block System Survey			Cemetery Lots, Sales and Bequests	•	
Smith-Hughes Fund George Reed Fund Cemetery Reserve Fund Appropriation Balances forward to Junior High School Building. World War Memorial Land Damages Building Laws Committee Expenses Athletic Field Survey Drainage System Construction Drainage System Survey Birch Meadow Development Birch Meadow Special Account Police Building Block System Survey			Receivable Revenue		712.50
Cemetery Reserve Fund  Cemetery Reserve Fund  Appropriation Balances forward to Junior High School Building.  World War Memorial  Land Damages  Building Laws Committee Expenses  Athletic Field Survey  Drainage System Construction Drainage System Survey  Birch Meadow Development  Birch Meadow Special Account Police Building  Block System Survey  Block System Survey			Smith-Hughes Fund		185.70
Cemetery Reserve Fund Appropriation Balances forward to Junior High School Building. World War Memorial Land Damages Building Laws Committee Expenses Athletic Field Survey Drainage System Construction Drainage System Survey Birch Meadow Development Birch Meadow Special Account Police Building Block System Survey			George Reed Fund		20.17
Appropriation Balances forward to Junior High School Building  World War Memorial  Land Damages  Building Laws Committee Expenses  Athletic Field Survey  Drainage System Construction Drainage System Survey  Birch Meadow Development  Birch Meadow Special Account Police Building  Block System Survey			Cemetery Reserve Fund		3,595.90
Junior High School Building  World War Memorial  Land Damages  Building Laws Committee Expenses  Athletic Field Survey  Drainage System Construction Drainage System Survey  Birch Meadow Development  Birch Meadow Special Account Police Building  Block System Survey			Appropriation Balances forward to 1931		
World War Memorial  Land Damages  Building Laws Committee Expenses  Athletic Field Survey  Drainage System Construction Drainage System Survey  Birch Meadow Development  Birch Meadow Special Account Police Building  Block System Survey			Junior High School Building \$	101.66	
Land Damages  Building Laws Committee Expenses  Penses Athletic Field Survey  Drainage System Construction Drainage System Survey  Birch Meadow Development  Birch Meadow Special Account Police Building  Block System Survey				4,069.82	
Building Laws Committee Expenses			Land Damages	50.00	
Athletic Field Survey  Athletic Field Survey  Drainage System Construction  Birch Meadow Development  Birch Meadow Special Account  Police Building  Block System Survey			Building Laws Committee Ex-		
Athletic Field Survey  Drainage System Construction Drainage System Survey  Birch Meadow Development .  Birch Meadow Special Account Police Building  Block System Survey			penses	366.45	
Drainage System Construction Drainage System Survey Birch Meadow Development Birch Meadow Special Account Police Building Block System Survey			Athletic Field Survey	492.00	
Drainage System Survey  Birch Meadow Development  Birch Meadow Special Account Police Building  Block System Survey			Drainage System Construction	156.19	
Birch Meadow Development  Birch Meadow Special Account Police Building			Drainage System Survey	312.51	
Birch Meadow Special Account Police Building			Birch Meadow Development	377.89	
Police Building			Birch Meadow Special Account	100.00	
Block System Survey				8,816.89	
			Block System Survey	39.13	

\$ 14,882.54 \$ 55.00 202.81 748.25 22.60 8,499.67 42,145.18	\$351,981.48	\$534,500.00
	\$134,000.00 75,000.00 69,500.00 14,000.00 1,000.00 195,000.00 45,000.00	\$ 53,729.03 42.62 157,424.52 5,391.99
Special Unemployment Fund Premium Account Sale Land Public Library Special Account Tax Titles Revenue Excess and Deficiency Account	\$531,981.48  DEBT ACCOUNTS \$534,500.00 Sewer Construction Loans Water Department Loans Municipal Light Dept. Loans Municipal Building Loans Mun. Building and Library Loans Brown Estate Loans School Building Loans Police Station	\$534,500.00  TRUST FUNDS  \$216,588.16 Cemetery Bequest Fund George F. Buck Fund Hospital Fund Reading High School Scholarship Fund  \$216,588.16
	Net Founded Debt	Trust Funds, Cash and Securities

# REPORT OF THE COLLECTOR OF TAXES

### Taxes 1928

Uncollected December 31, 1929 Interest collected Paid Treasurer Abated Uncollected December 31, 1930	\$	1,566.93 190.65	\$	1,678.03 63.30 16.25
			_	
Taxes 1929	\$	1,757.58	\$	1,757.58
Uncollected December 31, 1929  Interest collected	\$1	58,578.64 5,890.38		
Paid Treasurer			\$1	59,899.27
Abated				738.00
Transferred to Tax Title Account				1,607.61
Uncollected December 31, 1930				2,224.14
Taxes 1930	\$1	64,469.02	\$1	64,469.02
General Tax Warrant	\$5	29,489.75		
Interest collected	7-	326.46		
Paid Treasurer			\$3	39,717.22
Abated				2,008.64
Transferred to Tax Title Account				2,898.17
Uncollected December 31, 1930			1	85,192.18
	фг	29,816.21	0.5	29,816.21
Sewer Rentals	φ٥	29,010.21	фЭ	29,010.21
Uncollected December 31, 1929	\$	227.70		
Commitment January and July 1930	т	9,083.99		
Interest collected		22.64		
Paid Treasurer			\$	8,768.23
Uncollected December 31, 1930				566.10
	\$	9,334.33	\$	9,334.33
Sewer Betterment				
Commitment March 28, 1930	\$	259.35		
Commitment October 31, 1930		2,661.41	4	20101
Paid Treasurer			\$	386.96
Apportioned				118.08 2,415.72
Transferred to deferred payments				2,413.72
	\$	2,920.76	\$	2,920.76

Sidewalk Betterment Commitment October 17, 1930 Paid Treasurer Transferred to deferred payments	\$	770.53	\$	387. <b>24</b> 383.29
	\$	770.53	\$	770.53
Recapitulation				
Total receipts from taxes and assessments:				
Taxes		67,392.92		
Sewer assessments		11,172.41		
Motor vehicle excise		25,550.18		
Sidewalk		387.24		
Interest		6,432.67		
Costs and charges		872.60		
Sale of property		22.00		
Paid to the Treasurer as per Treasurer's receipts GRACE V. VIAI  REPORT OF TREASUR	LL,			11,830.02 Taxes.
				;
For the year ended December 31				
The transactions in the General Cash Accorder as follows:	oun	t in sum	mar	y form,
Balance January 1, 1930			\$ .	49,341.28
Receipts:			т	,-,-
Grace V. Viall, Collector	\$5	11,830.02		
Municipal Light Department		19,807.69		
Water Department		57,207.19		
Sewer Dept. Guarantee Deposits		2,167.41		
School Department		20,050.45		

6,856,44

2,193.25

15,844.51

525,000.00

95,000.00

785.33

6,707.00

9.684.96

1,666.74

5,583.05

Cemetery Department .....

Tree Warden and Moth Dept. .....

Other Departmental Receipts .....

Temporary Loans in Anticipation of Revenue

Bond Issues .....

Bond Premium and Interest .....

Trust Funds Income .....

Trust Funds Transfers .....

Interest on Deposits .....

Redemption of Property: Taxes, interest and costs

Commonwealth of Mass. Taxes	85,313.31 5,280.39	
Total Receipts		\$1,670,977.74
		\$1,720,319.02
Disbursements:		
	175,000.00	
Notes and Bonds, Funded Debt	69,800.00	
Interest on Funded Debt	22,841.00	
Discount on Notes	9,862.00	
State Taxes and Assessments	25,970.10	
· · · · · · · · · · · · · · · · · · ·	24,423.85	
Other Disbursements	01,583.38	
Total Disbursements		1,629,480.33
Balance December 31, 1930		\$ 90,838.69
Funded Debt		
	09,300.00 95,000.00	
		\$ 604,300.00
	69,800.00 34,500.00	
		7 404 200 00
		\$ 604,300.00
Notes Issued in Anticipation of Reve	nue	
	50,000.00 25,000.00	
		\$ 675,000.00
Notes paid in 1930	75,000.00 00,000.00	
	\$	675,000.00

A more detailed statement of receipts and disbursements, and statement of the Trust Funds may be found in the report of the Town Accountant.

PRESTON F. NICHOLS, Treasurer.

## REPORT OF THE BOARD OF ASSESSORS

## To the Citizens of Reading:

We herewith submit our report on work under our jurisdiction during the year 1930:

during the year 1930:	·
Valuation of Taxable Real Estate:	
Buildings, excluding land	\$10,681,475.00
Land, excluding buildings	3,984,475.00
Total Taxable Real Estate	\$14,665,950.00
Taxable Personal Estate	1,164,475.00
Total Taxable Real and Personal Estate assessed	
April 1, 1930	\$15,830,425.00
Building increase over 1929	416,850.00
Land increase over 1929	80,455.00
Total increase on Real Estate	\$ 497,305.00
Increase on Personal Estate over 1929	107,001.00
Total gain on taxable property	\$ 604,306.00
Valuation of excise tax for 1930	1,061,090.00
Increase on excise tax for 1930	43,360.00
Tax on Real Estate	459,047.51
Tax on Personal Estate	36,448.85
Tax on Excise	
Tax on Polls	5,846.00
Tax on Real Estate for Moth	871.25
Tax on Real Estate for Sewer	1,906.01
	m F20 422 7F
Additional Polls	\$ 529,433.75 \$ 56.00
	\$ 56.00 \$ 14,840.00
State Tax, 1930	2,035.00
Metropolitan Sewerage Tax, 1930	7,992.01
Metropolitan Sewerage Tax, 1930	126.00
Snow Removal Tax, 1930	324.03
Municipal Lighting Tax, 1930	78.73
Fire Prevention Tax, 1930	146.14
,	

County Tax, 1930	22,402.62 2,021.23
Total State and County Tax, 1930	\$ 49,965.76 56,872.37
Decrease in 1930	\$ 6,906.61 592,612.26 49,965.76 3,760.28
Total assessments, 1930       \$120,000.00         Less Estimated Receipts       \$120,000.00         Less Excise Tax       25,000.00         Less 2,923 Polls @ \$2.00       5,846.00	\$ 646,338.30 150,846.00
Amount to be raised	-
sessed April, 1930	2,690 3,022
Number of separate assessments, 1930  Number of polls, 1930  Number of polls, 1929  Increase in polls  Number of horses	5,712 2,951 2,856 95 84
Number of cows Number of neat cattle Number of swine Number of dwelling houses Number of acres of land	173 24 32 2,401
Value of Town property  Value of property exempt	\$ 1,360,030.00 526,260.00
Total non-taxable property  Total taxable property  Total value excise tax	\$ 1,886,290.00 15,830,425.00 1,061,090.00
Total value, 1930	\$18,777,805.00

#### Report of the Survey of Land Under the Block System

We have now completed 73 plans which contain 3,620 Appropriated, 1930	-	500.00 4.50
	\$	504.50
Expended		
Davis & Abbott, correcting plans \$ 11.00		
Davis & Abbott, correcting plans 66.97		
Davis & Abbott, 4 new plans		465.37
Balance	\$	39.13
We would advise that the sum of \$500 be appropriately seeming years that the small of the Plants System I was the		

coming year that the work of the Block System be continued.

I. FRED RICHARDSON. ALVAH W. CLARK, GEORGE E. HORROCKS,

Board of Assessors.

#### REPORT OF THE PLANNING BOARD

During the early months of the year 1930, the Planning Board completed its consideration of the matter of improving and re-arranging Reading Common. Article 28 was entered in the warrant of the annual Town Meeting, where it was voted not to appropriate any sum at that time for the purpose, indicating that the townspeople did not concur with the Planning Board that the Square and Common should be rearranged and beautified, it being the main contact with the people who pass through, selling to them the idea of Reading as a better place to live in. The Board is still firm in advising against the expenditure of further sums on the present Common, and urges that any money used for the purpose be so used toward the ultimate development of the traffic circle and lay-out, as proposed by the Town Planner, Mr. Arthur A. Shurtleff.

The Board helped to promote the matter of securing suitable land and planting a Town Forest. This project was eventually put into the hands of a special committee, and it is gratifying to this Board that the citizens acted favorably upon their recommendations and have established a Town Forest, which we feel confident the future will prove to be a worthy possession.

The matter of parks and playgrounds has been studied to some extent, but this matter was also subsequently placed in the hands of a special committee. We are certain that the profits derived from a system of parks and playgrounds, properly supervised, will reflect the good judgment of the townspeople in establishing it.

The Board has been called upon in several instances to consider changes in the zoning laws, as applied to specific locations where business enterprises desired an opening. The Board is, at the present time, holding hearings for both petitioners and objectors in the matter of re-zoning the easterly side of North Main Street from a Single and Multiple Resident District to a Musiness District. This change was requested by Article 8 in the Warrant of the Special Town Meeting of December 1, 1930, and the matter referred to the Planning Board for consideration and report at the March 1931 Annual Town Meeting.

The Board introduced to the various organizations of the town, who interest themselves in civic affairs, the idea of having each appoint one or more members to, what we have called, a Consultation Committee. This, we believe, will assist in overcoming one of the major handicaps of the Planning Board, namely, that of duplication. In many instances the Board has started work on certain proposals, only to find, within a short time, that one or more committees, appointed by other departments or town organizations, had been given the same work to handle. We expect, by closer contact with the various organizations, through their appointed representatives, to eliminate a great deal of duplication, and also to add valuable material and ideas more readily to the development of any particular project. By such a committee all of the organizations of the town would be kept informed of the progress being made in certain civic proposals in which they were interested. With the desirable and proper co-operation and co-ordination, these projects would be more perfectly developed, and brought more rapidly to a conclusion.

Today, to illustrate, there are at least four fairly well crystallized plans for the development of Birch Meadow. Each of these has outstanding points of merit and, with proper management, could contribute largely to a more perfect and direct development of the Birch Meadow tract.

The Board has this year been most unfortunate in losing the services of its Chairman, Mr. Leland W. Kingman, who resigned at the advice of his physician the early part of January 1931. Mr. Kingman was a most enthusiastic member, and during his time of service rendered an immense amount of valuable and hard work.

On February 6, 1931, Mr. Louis M. Lyons was appointed by the Board of Selectmen to fill Mr. Kingman's vacancy for the remaining period to the March 1931 Annual Town Meeting.

During the coming year this Board hopes for the continued support and co-operation of the various town officials, organizations and citizens in general, interested in the civic development of the Town of Reading.

Respectfully submitted,

GEORGE W. G. POOLE, Chairman FREDERICK E. BOYERS, Secretary WINTHROP D. PARKER McPHERSON DANIEL LOUIS M. LYONS

#### REPORT OF TOWN COUNSEL

To the Honorable, the Law Committee of the Town of Reading:

I beg to submit my report as Town Counsel covering the period from the date of my appointment, April 15, 1930 to December 31, 1930.

I have, in the performance of the duties of my office, attended hearings of the various Boards, given advice and opinions on Town matters, drafted all documents and legal instruments, prosecuted all suits brought in behalf of the Town and appeared in defence of all actions or suits instituted or pending against the Town and have performed every professional act pertaining to the office.

At the time of my appointment, there was pending certain litigation brought by William H. Killam involving the assessment of land damages for a taking made by the Town through his land for the permanent maintenance of the sewer line therein. Numerous conferences have been held with counsel representing Mr. Killam in an effort to negotiate a satisfactory adjustment. Progress has been made and the parties have agreed upon a compromise subject to the approval thereof by the citizens of the Town.

There is still pending the suit brought by Richard M. Cutts for personal injuries and property damage as a result of an accident on the highway; also three other suits brought by Ruth Pearse, Eva M. Pearse and Benjamin E. Sefton, for damages as a result of alleged defect in the highway. These suits were referred to in the Town Counsel's report for 1929.

There are pending also several claims against the Town for damages, which claims have not yet been made the subject of suit; such claims were outstanding at the time of my appointment on April 15, 1930.

Suit has been brought against the Town in behalf of Mildred J. Gray to recover damages to property at 17 Kingston Street resulting from certain blasting operations conducted by the Town in constructing a drain through the claimant's property. The ad damnum in the writ is \$10,000. Many conferences and negotiations for settlement have been

carried on in this case, but have not been productive of results. A similar claim has been made against the Town by Warren L. Martin for damage to property No. 19 Kingston Street. A settlement, however, has been effected with Mr. Martin by payment of \$100.00 and a release taken. This settlement was made under authority of vote of your committee.

Litigation is pending against the Town in behalf of Ida C. Smith to recover \$4,000 as a result of personal injuries sustained from alleged defect on Pleasant Street. Investigation of all the facts relative thereto has been made, and the injured person has been examined by a reputable physician and all necessary steps taken for the proper protection of the Town.

Jennie Peters of Boston has commenced suit against the Town to recover \$200.00 for damages to an automobile as a result of an alleged defect in the highway. No settlement has been authorized in this matter.

A petition in behalf of Anna Goldberg, the owner of property on the westerly side of Main Street in Reading Square, has been brought against the Board of Assessors appealing from the decision and determination of the Board in refusing to abate the real estate tax assessed for 1930. These proceedings were brought before the State Board of Tax Appeals under the provisions of the Acts of 1930, Chapter 416, which became effective December 1, 1930. The proceedings are still pending and a preliminary hearing has been held on the sufficiency of the form of petition; pleadings have been drafted and filed for and in behalf of the Board, and the case will be heard on its merits in due course.

I have drafted under instructions from the Board of Selectmen and they have adopted certain Orders, Rules and Regulations Relating to Operation of Motor Vehicles for Carriage of Passengers for Hire.

The usual routine matters of answering to trustee suits and the examination of records and titles in the Registry of Deeds in connection with the activities of the Board of Public Works with respect to sewers, drains, new street layouts and the construction of granolithic sidewalks, and also various hearings at the State House upon the abolition of grade crossing, granting of license for the operation of motor busses for carriage of passengers for hire, and proposed legislation in which the Town is interested, have occupied considerable time.

I take this opportunity of expressing my appreciation to the various departments and officials of the Town for their co-operation and assistance extended to me in the performance of the duties of my office.

Respectfully submitted,

SAMUEL H. DAVIS,

Town Counsel.

#### REPORT OF PUBLIC LIBRARY

The Trustees of the Public Library submit the following report for the year ended December 31, 1930:

#### Organization of the Board

The Board organized for the year by the election of Mr. Mansfield as Chairman and Mr. Keneely as Secretary. Standing Committees were appointed as follows:

On Accounts: The Board of Trustees.

On Books: Mr. Mansfield, Mrs. Lucas, Mrs. Weeks-

On Building and Grounds: Messrs. Keneely, Morton and Barclay.

On Work with Children: Mrs. Weeks, Mrs. Lucas and Mr. Keneely.

## Expenses of the Library

Maintenance	,
Total	\$ 8,000.00

#### Expended

Salaries: Librarian, Assistants and Janitor. Books and periodicals, including rebinding Printing, stationery, etc. Fuel, light, sewerage Repairs and furnishings Telephone All other expenses	
Total Balance unexpended:	\$ 7,786.24

On Salaries162.85On Maintenance50.91

Total ..... \$ 8,000.00

## Receipts

Fines collected	\$	487.03 44.17
Total Paid to Town Treasurer	\$	442.86 442.86
Balance on hand Dec. 31, 1930	_	.00
Statistics		
Volumes in the library December 31, 1929  Volumes bought (including duplicates and replacements):  Adult fiction		15,586
Juvenile fiction         - 208           Juvenile non-fiction         65         273		
Reference		913
Received by gift, Mass		105
Withdrawn during year		16,604 399
Total number of volumes, December 31, 1930		16,305 41,775 19,507
Total circulation Increase over previous year Largest monthly circulation, March Smallest monthly circulation, June New borrowers registered, adult New borrowers registered, invenile		61,282 5,460 6,149 3,786 316 217
Total		533

Number of days on which the library was open	301
Average daily circulation, adult	139
Average daily circulation, juvenile	65
Volumes deposited in schools	372

The circulation of books for home use shows an increase of 5460, nearly 10 per cent over 1929.

The following table gives data relative to the Library for the last five years.

					Total
	Population	Borrowed	No. of Days	Volumes	Expendi-
Year	April 1st	Home Use	Lib. Open	In Lib.	ture
1926		50,216	290	13,880	\$6,800.89
1927		52,768	291	14,339	7,188.58
1928		56,646	301	14,866	7,433.99
1929		55,822	301	15,586	7,396.94
1930	9,747	61,282	301	16,305	7,786.24

The cost per volume circulated in 1930 was 12.7 cents; the average for the last five years, 13.2 cents; circulation per capita in 1930 was 6.3 cents and the cost per capita, 80 cents.

The following is in part the report of the Librarian to the Trustees:

The circulation of books for home use again shows an increase in keeping with the growth of the town. It seems unavoidable with the open shelf system to lose a few books, but the number was a little smaller this year owing mainly to a smaller number lost from the collections loaned the schools.

The Woman's Educational Association loaned the library a set of pictures of Maine scenery which were exhibited for four weeks in the spring.

In the exhibition case were shown by the Art Committee of the Reading Woman's Club, fans, valentines, old books and almanacs, samplers and other old needlework, old china, and miscellaneous old-fashioned articles as the Tercentenary celebrations made such things of special interest in the spring and summer. The library for several months kept on the desk near the entrance a row of books on early Massachusetts history, displayed on the bulletin

two old maps of Reading. Much interest was shown in both maps and books. The Librarian at the request of the Massachusetts Bay Colony Commission sent in a list of dates of historical events from 1630 to date which had happened in Reading, and suggested the Parker Tavern in answer to their question about historical sites for markers to be provided by the Commission. In December the library received a copy of the book "Historical Markers erected by the Massachusetts Bay Colony Commission."

The Reading Grange this year gave the library two reference books

Shepherd. "Historial Atlas" Thompson. "Economic and social history of the Middle Ages"

The Reading High School Latin Club of 1930 gave twenty-one volumes;

Austin. Saga of the sea. Austin. Saga of the sword Boissier. Cicero and his friends. Cicero. De Senectute. Crew. Trojan boy. Ditmars. Reptiles of the world. Duff. Writers of Rome. Fairclough, ed. Virgil 2 vol. Ferrero. Women of the Caesars. Ferrero. Characters and events of Roman history. Firth. Augustus Caesar. Fowler, Social life in Rome in the age of Cicero. Hamilton. Ancient Rome. Hodgkin. Theodoric, the Goth. Horace. Satires. Knotterus-Meyer. Birds and beasts of the Roman Zoo. Ovid. Heroides and amores. Peskett. Caesar; the Civil Wars. Roberts. Arundel.

On November 6, the Librarian gave a talk at assembly at the High School on the use of the library, giving a brief description of the system of classification, the card catalogue and the Reader's Guide to Periodical Literature as a help to the pupils in their reference work.

Wheeler. Alexander the Great.

The library has borrowed to meet an occasional demand for some book it did not seem necesary to buy, from the

Wakefield Library	10 volumes
Division of Public Libraries	8 volumes
Stoneham Library	2 volumes
Mass. Agricultural College	1 volume
Boston Public Library	3 volumes
Brookline Library	2 volumes
Mass. Institute of Technology	1 volume
State Library	1 volume
Lynn Library	1 volume
oaned	
Stoneham Library	8 volumes
Wakefield Library	1 volume

and has 1

Six of the volumes borrowed from the Division of Public Libraries were on the list of required reading for a University Extension course on Mental Hygiene given at the High School but open to anyone in town. As the Library owned only two on the list these additional volumes were loaned for two months.

Boston Public Library ...... 1 volume

The new double book-stack added to the library equipment made possible a much better arrangement of the non-fiction and the new catalogue case acquired just before the end of the year has been very favorably commented on for its greater convenience.

The addition of another evening to the library hours of opening has been much appreciated.

#### Maintenance

As noted in the Librarian's Report a new double book stack, having a capacity of about 1200 volumes, was installed. A twenty-four drawer catalogue cabinet was added. Three corroded water spouts were replaced with copper spouts. The water conductor system is now well replaced with permanent copper.

#### School Reading

For many years the Library staff has co-operated with the teachers of the Public Schools in a course of reading recommended by the State Board of Education for the pupils of the lower grades. For the past few years Mrs. Lucas, of the Trustees, and also as a teacher has taken particular interest in this work. With the assistance of the Librarian and the teachers this work reached its most extended range during the past year.

On June 19, 1930 the last Thursday of the school year, at an assembly in the Highland School Hall one hundred and twenty-six children received state certificates for reading. This does not include some pupils in the Junior High School who received certificates earlier in the year nor several others who failed to get their certificates signed in time for the presentation.

The above statement does not mean much as it stands without explanation and to one on the outside does not even suggest the bigness of the accomplishment. It means that your Public Library has loaned to your children in the fourth, fifth and sixth grades over thirteen hundred books since September 1929. More than that, each of these books is on a list recommended by the State Board of Education. Now this list does not by any means include all the worth while books for children to read but every book that it does include has a recognized place in our literature. The list includes fairy tales, old legends, stories of other lands, history, biography, poetry, science, adventure, natural history, and straight novels.

To get a certificate a pupil must not only read five of the listed books but, with no notes to refer to, must fill out an examination sheet furnished by the state. On this he must write the title of the book, the name of the author, the important characters and tell what he liked best in the book. This paper is corrected by some one connected with the library, checked up to see that the writer has not reported on any of the books for a previous certificate and if satisfactory he receives a certificate signed by the librarian and the examination paper is filed away under his name. If he has made any mistakes the examination is passed back and later he may try again.

In addition to this any pupil who reads twenty books, five of which are non-fiction, is given a large certificate with the state seal in blue and gold.

#### Certificates were awarded as follows:

2 pupils received 8 five-book certificates each 7 1 pupil 5 1 pupil 8 pupils 4 3 7 pupils 2 30 pupils 68 pupils 66 2 twenty-five book certificates 1 pupil 66 1 8 pupils

This does not include all of the books read from the state list for these are only those read by the children who have won certificates while many others have read the books but failed to pass the required examination.

Much credit is due to the teachers who have encouraged this reading and who have made this splendid record possible by taking time in their busy lives to prepare the children for the examinations.

#### Budget for 1930

In accordance with the requirements of the General Laws, Chapter 41, Section 59, the Board of Trustees of the Reading Public Library submit the following detailed estimate for the amounts deemed necessary for the proper maintenance of the Public Library for the fiscal year 1931.

ıı ye	ai 1901.
\$	450.00
	150.00
	2,000.00
	500.00
	100.00
\$	3,200.00
	5,000.00
_	
\$	8,200.00
	8,000.00
	\$

The Salary Budget is increased \$200.00 over the Salary appropriation for 1930, although a balance of \$162.85 was unexpended in 1930. The Library hours have been increased one evening. The salaries of the Librarian and Assistant Librarian were not increased in 1930 although more than warranted by the high quality of their work and length of service. The Trustees desire to fulfill this obligation in 1931.

It is estimated that an income of about \$400.00 will be received during 1931 from the "Fine" account.

It is with much pleasure that the Trustees again record their appreciation of the faithful and efficient services of Miss Bertha L. Brown, Librarian; Miss Grace J. Abbott. Assistant Librarian; and Miss Rebecca Turner, in charge of the Children's Room.

The work of the assistants has been up to its usual standard of excellence.

Two vacancies in the Board of Trustees are to be filled at annual town meeting, the terms of Ralph S. Keneely and Jesse W. Morton expiring.

ARTHUR N. MANSFIELD, Chairman RALPH S. KENEELY, Secretary JESSE W. MORTON HARRY J. BARCLAY IDA C. LUCAS JENNIE F. WEEKS

Adopted as the report of the Trustees

# REPORT OF THE BOARD OF CEMETERY TRUSTEES FOR THE YEAR 1930

The reports of the Superintendent of Cemeteries, Mr. William P. Pierpont, covering in detail the work of the Department and approved by the Trustees, is appended.

There have been no changes on the Board for the year. Mr. Philip H. Tirrell and Mr. Clarence C. White have served as Chairman and Secretary respectively.

The terms of Mr. Frank L. Edgerley and Mr. Fred L. Nutter expire in March, 1931, and it is hoped that they will be candidates for re-election.

The Board is again much gratified with the progress of the work which has been carried on and they feel that their policy of making a certain amount of permanent improvement each year has worked out very satisfactorily.

Most respectfully,

PHILIP H. TIRRELL, Chairman
CLARENCE C. WHITE, Secretary
FRED L. NUTTER
WINTHROP D. PARKER
HAROLD F. DAVIS
FRANK LEE EDGERLEY
Board of Cemetery Trustees

## LAUREL HILL CEMETERY REPORT, 1930

To the Board of Cemetery Trustees, Town of Reading, Mass. Gentlemen:

I herewith submit to you a summary of the work accomplished in Laurel Hill during the past season.

The general routine of cemetery work has been carried on and some permanent improvements have been made.

Elm Avenue has been macadamized from Locust Avenue to Oak Avenue, Cypress Avenue from Elm Avenue to Walnut Avenue and Walnut Avenue from Cypress Avenue to Elm Avenue, making 12,139 square feet of macadam, which can always be kept up with very little expense.

This improvement on these avenues not only makes them look much better, but also eliminates a large amount of the expense of labor in hoeing, raking and filling them when they were formerly dirt roads.

Seven catch basins have been built and 511 feet of corrugated drain pipe laid, which will take care of the water from the hills in this section of the cemetery.

We have had ninety-one interments during the year, sold ten lots and thirteen single graves.

Forty-two monument and marker foundations have been built and four hundred stepping stones have been placed in the paths.

A section of the Dexter Clapp land, set aside for lots, has been rough graded. Loam has been purchased and the work is to be completed in the spring.

I recommend the following macadam this year: Elm Avenue from the Lowell Street entrance to the north intersection of Locust Avenue, and a part of Locust Avenue from the south intersection of Elm Avenue to the top of the hill; Laurel Avenue from Cross Avenue to Pine Avenue; and also tarvia on as many avenues as possible.

The financial statement will appear in the report of the Town Accountant.

Respectfully submitted,

WILLIAM P. PIERPONT

Superintendent

## FOREST GLEN CEMETERY REPORT, 1930

To the Board of Cemetery Trustees, Town of Reading, Mass.

Gentlemen:

The regular maintenance work has been kept up during the year and also some improvements have been made.

The extension of the wall on Forest Street from the entrance to the west boundary has been completed and capped, a distance of ninety-four feet, finishing the section now developed.

We have placed two hundred stepping stones in the paths, planted numerous shrubs and trees and also teamed considerable filling to the undeveloped section west of the Forest Street entrance.

The name of Forest Street east of Main Street has been changed to Forest Glen Road, and a sign has been erected at Main Street, directing to the cemetery.

I would recommend that the macadamed avenue be resurfaced next season, as it has not been done since its construction. This will insure preservation from repairs for a number of years.

I also recommend planting more shrubs and placing two bronze tablets at each entrance of the cemetery, and laying a drain pipe in the section next to be developed.

The financial statement will appear in the report of the Town Accountant.

Respectfully submitted,

WILLIAM P. PIERPONT

Superintendent

## REPORT OF MIDDLESEX COUNTY EXTENSION SERVICE WORK IN READING

To the Honorable Board of Selectmen, Town of Reading. Gentlemen:

I respectfully submit the following report of the work of the Middlesex County Extension Service conducted in the Town of Reading for the year 1930.

Because the Middlesex County Extension Service has become so firmly established as a county institution, the County Commissioners have signified their willingness of supporting the work without asking for the usual yearly appropriations from the towns.

It is my opinion that an amount of money be appropriated, as in other towns in the county, for local use. This money would be spent directly from the town treasury, under order of the Town Director, and would not be sent, as in previous years, to the Treasurer of the Extension Service. I therefore suggest that the sum of \$75 be appropriated for local use.

It might be well to consider placing the election of the Extension Service Director on the ballot, under the name "Director of Extension Service" election to be for one year. Under the article in the warrant which carries the appropriations for general town expenses, such as support of schools, roads and bridges, etc., an item headed Middlesex County Extension Service could be added and the money desired for local use be inserted.

The following is a report of the work of the Middlesex County Extension Service as developed in the Town of Reading for the year 1930:

In agriculture, most of the work was done with those interested in poultry and fruit. Poultry projects were developed largely in co-operation with the Metropolitan Reading Poultry Association. One county poultry tour visited four Reading poultry plants. The attendance on this tour was 109. Fourteen farm visits were made to assist local farmers with their individual problems.

In Boys' and Girls' 4-H Club work 145 were enrolled in garden, poultry, food, clothing and forestry clubs. These clubs were organized under the able leadership of Mrs. Ida C. Lucas, Mrs. F. W. Miller, Mrs. Elizabeth Rossman, Mrs. M. C. Davis, Mrs. Rolland L. Perry, Mrs. Doughty, Miss Harriet Burr, Miss G. A. Henderson and Ross Chapin. Norman Hinds was awarded a medal by the Massachusetts Horticultural Society for doing excellent garden work. Raymond Bell was the outstanding poultry boy, winning at the Boston Poultry Show and several other poultry exhibits. Katherine McCarthy was awarded a two-day trip to the Massachusetts Agricultural College for outstanding club work. The 4-H Club rally took place at the Reading Junior High School, at which time 30 clubs from Reading and surrounding towns were represented.

In homemaking there were two projects developed, one in vegetable preparation and one in improving home grounds. Two groups of homemakers were interested in these projects and in addition to those who attended the meetings, much of the information was passed on to a large group of homemakers. Eight home visits were made with specialists from the State college to assist in the improvement of home grounds.

A campaign to eradicate rats from farm and home buildings was carried on on a county-wide basis and a great many of the poison baits were distributed in Reading.

Many local people took part in the several county-wide meetings held during the year, such as the county picnic at Wayside Inn, Sudbury, and the Homemakers' Day at Lexington.

ROLLAND L. PERRY, Director.

## REPORT OF THE BOARD OF APPEAL

To the Honorable Board of Selectmen: Gentlemen:

Five petitions for relief from provisions of the Zoning By-Law were presented to the Board of Appeal during 1930, on all of which public hearings were given. Of these petitions, one was granted, three were denied, and on the remaining petition the Board found no action was necessary.

The petition on which relief was granted was for construction of an addition to a residence, bringing the structure nearer to the street than permitted by the By-Law.

The three petitions denied were for variations to permit the construction and use of buildings for business purposes in residential districts.

Respectfully submitted,

HENRY Q. MILLETT, Chairman, FRED L. NUTTER, Secretary, CHARLES A. DAMON.

Board of Appeal.

## REPORT OF THE INSPECTOR OF ANIMALS

To the Honorable Board of Selectinen, Reading, Massachusetts. Gentlemen:

It is my pleasure now to submit my report as Inspector of Animals for the year 1930.

Early in the year, instructions were received to make a tour of inspection of all cattle, sheep and swine kept within the Town limits, and also the premises where such animals were housed.

This inspection was made in due time and a report made to the Division of Animal Industry, which department has charge of such work.

Many farmers are going into the accredited herd plan, whereby cattle are tested every six months until no reaction for tuberculosis occurs. Diseased animals are removed from the herd and paid for by the State and Federal authorities under whose supervision the tests are made.

The plan cannot be too highly lauded as a step toward better health for the community through pure milk. At present about fifty per cent of the herds in the Town are under State and Federal supervision.

Rabies appears to be on the decline. Few cases have been reported during the year, and in those few cases the most damage has been done to live stock. Several valuable animals have had to be destroyed after being bitten by a rabid dog, and it is still my urge that every precaution be taken to report any and all animals under suspicion. Symptoms of the disease are printed on the reverse side of every dog license and dog owners should familiarize themselves with them.

Respectfully submitted,

CALVERT H. PLAYDON,
Inspector of Animals.

#### REPORT OF THE BOARD OF HEALTH

To the Honorable Board of Selectmen: Gentlemen:

The following is the report of the Board of Health for the year ending December 31, 1930.

There were seventy (70) contagious cases reported during the year 1930.

Chicken Pox	1
Diphtheria	11
Measles	25
Scarlet Fever	7
Tuberculosis	16
Whooping Cough	3
Potts Disease	1
Anterior Poliomyelitis	1
Cerebral Spinal Meningitis	2
Rabies	3

April 4, 1930, upon an invitation from the Board of Health, Mr. Joseph C. Cort of the State Department of Agriculture, spoke to the local milk dealers of the importance of milk being pasturized or coming from tuberculin tested cattle. This meeting resulted in the Board accepting the law that on or before October 1, 1930, all milk sold in Reading must be received from tuberculin tested cattle or be pasteurized.

At the request of the Board of Health the State Department of Public Health made a health survey of the town. This was submitted the latter part of the year and we hope to act on same in the near future.

Respectfully submitted,

E. M. HALLIGAN, M. D. C. F. ATKINSON,

G. W. S. IDE,

Board of Health.

#### REPORT OF THE BUILDING INSPECTOR

To the Honorable Board of Selectmen, Gentlemen:

I herewith submit my report for the year ending December 31, 1930.

The building construction for the past year was as follows: 47 new one family dwellings at an estimated cost of \$263,200.00; 19 alterations and additions to dwellings at an estimated cost of \$31,335.00.

New police station, 1 new three-car garage, 17 new two-car garages, 26 new one-car garages, 3 new blocks of stores, 3 new greenhouses, 1 new roadside stand, 1 new tool shed, 16 new henhouses, 18 alterations and additions to various buildings.

Estimated cost of the above buildings, \$129,595.00.

Total estimated cost of all new and remodelled buildings for the past year, \$424,130.00.

Respectfully submitted,

A. RUSSELL BARNES, Inspector of Buildings.

### REPORT OF INSPECTOR OF PLUMBING

To the Board of Health:

Gentlemen: I herewith submit my report for the year endir	ng
December 31, 1930.	J
Number of permits granted	122
	582
Bath tubs 95	
Lavatories	
Closets	
Sinks 113	
Wash trays 104	
Showers 8	
Drinking fountains 4	
Urinals 4	
Boilers 60	

DAVID TAGGART, Inspector of Plumbing.

## REPORT OF MILK INSPECTOR

Respectfully submitted,

To the Honorable Board of Health, Town of Reading, Mass. Gentlemen:

The inspection of the local milk supply for this year has varied very little from that of previous years with one notable exception, which was the acceptance by your board of a regulation prohibiting the sale of milk from any but tuberculin-tested cows unless pasteurized. To me this is a very important and creditable step. At the present time I can report that practically all of the herds have had their first test and a great many of them, the second test.

The usual inspections of dairies and equipment have been made, and I can report that the condition of the same are very good.

The average percentage of fats and total solids content of the local milk was a trifle higher for this year than last.

Yours respectfully,

CARL M. SMITH, Inspector of Milk.

#### REPORT OF SEALER OF WEIGHTS AND MEASURES

To the Honorable Board of Selectmen, Town of Reading, Mass.

#### Gentlemen:

The following is the report of the Department of Weights and Measures for the year 1930. As in previous years the work has consisted of the testing and sealing or condemning of all scales, weights, and measures used in the Town. Also the enforcement of the many laws regulating the sales of all commodities and the supervision of all peddlers and peddling.

By a comparison of the tabulated report of last year's work with the following report for this year's work you will readily see that there has been a substantial increase in the same. This is partially due to the establishment of several new stores and the installation of new gasoline pumps.

The following is my report of work completed for this year:

Work Performed from Dec. 1, 1929, to November 30, 1930, Inclusive

	Adjusted	Sealed	Condemned
Platform Scales, over 5,000 lbs	2	3	r (
Platform Scales, under 5,000 lbs	12	16	
Counter Scales	12	29	1
Spring Scales	16	43	1
Computing Scales	10	25	2.
Slot Weighing Scales		3	1.
Weights		183	7
Gasoline & Oil Measuring Pumps		64	3
Yardsticks		18	
Quantity Measures on Pumps	78	332	
Total	130	716	15

Trial Weighings and Measurements of Commodities Sold or Put up for Sale

	Total	No.	Incor	rect
Commodity:	No. Tested	Correct	Under	Over
Bread	14	10	1	3
Butter	43	41	2	
Coal, in paper bags	14	7	2	5
Coal, transit	2		2	
Dry Commodities	57	55		2
Flour		15	2	1
Fruits & Vegetables	50	26	14	10
Grain & Feed		8		
Ice	5		1	4
Meats & Provisions	6	6		
	217	168	24	25

#### Reweighing of Coal

No. lbs. in load	No. 1bs. in load	
by certificate	by sealer's weighing	
14,200	14,135	65
14,510	14,460	50

Inspections

Coal certificates, 2 Marking of food pkgs. 1 Labels on bread, 6 Ice scales, 2 Junk scales, 3

Yours respectfully,

CARL M. SMITH, Sealer.

## TREE WARDEN'S REPORT, 1930

To the Honorable Board of Selectmen: Gentlemen:

I have planted three hundred and twenty shade trees on the roadside during the past year, and I expect to plant about the same number the present year. Many of the older trees are dying out from the effects of the ice storm ten years ago, and will need considerable attention the coming year.

No brown-tail webs have been found the past year and the trees have been carefully inspected for gypsy moth eggs.

Respectfully submitted,

HENRY M. DONEGAN, Tree Warden and Moth Supt.

## REPORT OF THE FOREST WARDEN FOR THE YEAR ENDING DECEMBER 31, 1930

To the Honorable Board of Selectmen, Gentlemen:

The annual report of the Forest Warden is herewith submitted for the year ending December 31, 1930.

My financial transactions are all embodied in the report of the Town Accountant to which I refer you for any information you may desire in that line.

I appointed the same deputies as in previous years, namely: Henry M. Donegan, Hugh L. Eames and John J. O'Brien.

Combination C is used for all grass and brush fires. This machine is equipped with 1,200 feet of  $1\frac{1}{12}$  inch hose as well as pump, cans, brooms, and extinguishers.

During this year I found a very great need for a portable pump and especially at the big brush fire off Franklin Street when I had to send to Danvers for one. Also to properly protect the Town Forest I recommend the expenditure of \$800.00 to purchase this equipment.

I have caused to be posted all woodlands and have investigated all fires and sent reports to the Deputy State Forest Warden.

In concluding I wish to thank all who have in any way assisted the department during the year.

Respectfully submitted,

ORVILLE O. ORDWAY,
Forest Warden.

## REPORT OF THE FIRE DEPARTMENT FOR THE YEAR ENDING DECEMBER 31, 1930

To the Honorable Board of Selectmen, Gentlemen:

The annual report of the Fire Department is herewith submitted giving the record of alarms that have occurred during the year ending December 31, 1930, together with such information as I think may be of interest to the Town.

#### Finances

My financial transactions are all embodied in the report of the Town Accountant to which I would respectfully refer you for any information you may desire in that line.

#### Manual Force

The Department consists of nine permanent men (including the Chief) and twenty-one call men.

#### Apparatus and Equipment

The Department has five pieces of motor apparatus, four of which are at the Central Fire Station as follows: One Knox triple combination of 600 gallons per minute capacity which was purchased in 1913; one Seagrave triple combination of 600 gallons per minute capacity which was purchased in 1929; one Robinson combination service ladder truck which was purchased in 1916 and one 1910 Simplex combination which was given to the department by Mrs. Chester Brown. This machine was rebuilt by the permanent force and placed in service in 1923. This machine is equipped for grass and brush fires.

At Engine 2 Station on Woburn Street there is a Seagrave triple combination of 400 gallons per minute capacity which was purchased in 1926.

All of the trucks are in good condition excepting the Knox combination. This machine has had several major break downs this year. As the Knox Company has not been in business for a number of years there is always a long delay in getting repair parts. On one occasion this year the machine was out of commission for two weeks while I was getting parts and installing them.

#### Recommendations

I would recommend the expenditure of \$12,500.00 for the purchase of a 750 gallon triple combination to replace the Knox machine this year because I think that it is very poor policy to depend on this machine any longer. The New England Insurance Exchange recommended that it be replaced by a 750 gallon machine in their 1925 report.

I also recommend the purchase of 500 feet of hose this year. And that the Town vote to pay a reward of \$25.00 for information leading to the arrest and conviction of persons sounding a false alarm.

#### Fire Prevention

I have issued 1,209 permits for fires out of doors, 46 permits for the installation of oil burning equipment, 6 permits for the sale of fireworks, 4 permits for the transportation of explosives and 3 blasting permits. I have made or caused to be made regular inspections of all mercantile establishments with follow-up inspections to see that recommendations were carried out.

#### Record of Alarms

Month	Bell	Still	Total
January	1	5	6
February	4	11	15
March	14	57	71
April	31	88	119
May	12	27	39
June	10	10	20
July	9	12	21

August	5	8	13
September	7	16	23
October	7	15	22
November	10	23	33
December	5	20	25
Total	115	292	407
Miles traveled			1,404
Feet of 2½ inch hose laid			33,100
Feet of 1½ inch hose laid			24,100
Feet of chemical hose used			7,400
Feet of ladders raised			852
Gallons of chemical used			405
Gallons of gasoline used			1,148
Gallons of oil used			57
Value of property in danger		;	\$101,910.00
Insurance thereon			89,135.00
Loss thereto			14,553.75
Insurance paid thereon			14,387.75
Uninsured loss			166.00

#### Conclusion

In concluding, I wish to extend to your Honorable Board, the Town Accountant, Treasurer and the Finance Committee, my thanks for the courtesies and co-operation I have received during the year. I wish to compliment the officers and members of the department on the prompt and efficient manner in which they have performed their duties. I also wish to express my thanks to the Eastern Massachusetts Street Railway Company for the use of current, to the Chief of Police for the services rendered by his department at fires and to the employes of the New England Telephone and Telegraph Company for prompt and efficient service rendered in receiving alarms by telephone.

Respectfully submitted,

ORVILLE O. ORDWAY, Chief of Fire Department.

#### REPORT OF THE INSPECTO ROF WIRES

To the Honorable Board of Selectmen:

I hereby submit my report for the year ending December 31, 1930.

Number of inspections, 504. In four cases the new wiring was condemned as the work was installed in a manner to create a fire hazard. Four electricians were reported to the State Examiners of Electricians. Six complaints were received and investigated.

The adoption of by-laws to govern wiring would be of great aid to the inspector.

As a rule the electricians have installed their work in a careful manner but the public should beware of the unlicensed electrician and the electrician who fails to notify the inspector of wiring done.

The poles of the several companies have been inspected and many of the unsafe ones have been replaced. There are yet 115 to be replaced in 1931.

I wish to thank the public and electricians who have assisted me in my work.

Respectfully submitted,

HUGH L. EAMES, Inspector of Wires.

#### REPORT OF THE CHIEF OF POLICE

To the Honorable Board of Selectmen, Gentlemen:

I herewith submit the annual report of the Police Department of the Town of Reading for the year ending December 31, 1930.

#### Arrests for Year 1930 - 319

Males, 312; females, 7; residents, 79; non-residents, 240; adults, 284; minors, 35; American born, 277; foreign born, 42.

#### Causes of Arrests

Larceny, 4; assult and battery, 2; drunkenness, 99; driving under influence of liquor, 41; warrants for out of town officers served, 10; misappropriation of automobile, 1; automobile violation, 108; illegal manufacture of liquor, 8; driving negligently, 19; delinquents, 2; breaking and entering, 9; assault with dangerous weapon, 3; Insane, 2; assault with intent to commit rape, 1; non-support, 3; keeping and exposing liquor for sale, 4; murder, 1; violating parole, 2.

#### Disposition of Cases in Court

Fined, 157; released, 27; on file, 61; probation, 3; discharge, 14; turned over to out of town officers, 14; held for Grand Jury, 1; appealed, 8; House of Correction, 3; House of Correction suspended, 4; Lyman School, 2; Concord Reformatory, 2; Danvers State Hospital, 3; dismissed, 1; not guilty, 19; default, 2; Shirley School, 3; Concord Reformatory suspended, 1; State Prison, 1.

#### Miscellaneous

Complaints investigated, 175; automobile accidents, 210; guarding post office mail, 72; guarding pay roll, 64; building found open and secured, 121; street lights out, 23; lost children found and returned to parents, 23; dogs killed by officers, 24; dogs killed by automobiles, 10; summons served for out of town officers, 106; automobiles reported stolen

by out of town officers, 115; people reported bitten by a dog, 3; wires found down by officers, 7; windows found open and secured, 19; defective streets reported, 7; dead bodies taken care of, 5; search warrants served, 6; accidents other than automobiles, 4; runaway horses stopped by officers, 1; dogs found and returned to their owners, 4; call Fire Department, 5; property left outside stores, value \$260.00; property reported stolen, \$3,578.00; property recovered, \$2,737.00; vacated houses and special attention asked, 20; automobile transfers, 265. Police ambulance has made the following runs to hospitals: Tewksbury, 3; Winchester, 6; Melrose, 4; Danvers, 3; Boston City, 2; Carney Hospital, 1; doctors' offices, 7.

## Amount of Fines Imposed by Court

37 at \$5.00 each, \$185.00; 10 at \$15.00 each, \$150.00; 8 at \$25.00 each, \$200.00; 1 at \$35.00 each, \$35.00; 53 at \$10.00 each, \$530.00; 6 at \$20.00 each, \$120.00; 3 at \$30.00 each, \$90.00; 42 at \$50.00 each, \$2,100.00.

I recommend a new ambulance as the department is handicapped as the present one is inadequate for the amount of work this department has to do.

#### Conclusion

At this time I wish to thank the Honorable Board of Selectmen, the Judges of District Court, our local Press, and all others who have assisted in promoting the welfare of this department; also the members of the force for what they have done.

Respectfully yours,

JEREMIAH CULLINANE,

Chief of Police.

## REPORT OF THE SUPERINTENDENT OF FIRE ALARM

To the Chief of the Fire Department:

Sir: The report of the Superintendent of the Fire Alarm for the year ending December 31st, 1930, is herewith submitted.

Five new boxes have been purchased and installed.

Due to the replacement of poles by the several companies it has been necessary to change construction on 536 poles, rerun about six.miles of wire, and replace three miles of wire with new. It is estimated that 115 poles will be replaced in 1931. With these replacements the system will be in condition to need no repairs for several years.

It is recommended that three miles of old wire be replaced with new. That the fire alarm wires through the square be placed underground and that a master box be located at School and Dudley Streets with remote control stations in the Grouard House and the Opportunity School thereby giving fire alarm box protection to those schools.

## Fire Alarm

112	Woburn and Sanborn.	33	Lowell, Grand & Gould Ave.
113	Woburn and Bancroft Ave.	34	Grove and Forest.
114	Mt. Vernon and Chute.	35	No. Main and Locust.
115	Woburn and High.	36	No. Main and Ridge Rd.
12	Central Fire Station.	37	No. Main front of 409.
121	Main and Haven,	38	No. Main and Forest.
122	Haven and Gould.	381	Forest nr. Colburn Ra.
123	Green, east of High.	39	No. Main and Franklin.
13	Ash and Avon.	392	No. Main and Mill.
14	Oak and Hill Crest Rd.	41	Village and Green.
141	Hill Crest Rd. and Howard	412	Boston Stove Foundry.
15	Summer Av. and Walnut	414	Green and Beech.
152	Summer Av. and Penn. Ave.	42	John and Haven.
16	So. Main and South.	422	Pleasant and Eaton.
18	Minot and Park Av.	43	Salem and John.
19	Walnut and Curtis.	44	Salem and Pearl.
21	Summer Av. and Temple.	442	Pierce and Orange.
211	Prescott and Arlington.	45	Salem and Belmont.
212	Prescott and Sunnyside Ave.	452	Salem and Libby Ave.
213	Pratt and Fairview Rd.	46	Charles and Pearl.
217	West and Howard.	47	Charles and Haverhill.
221	Union St. School. (Private)	48	Bay State Rd.
223	Center School.	*482	Old Fair Grounds, off Salem.
224	High School (Private)	*485	Rifle Range, off Haverhill St.
225	Highland School. (Private)	49	Haverhill and Franklin.
226	Lowell St. School	51	Main, Ash and Washington.
227	Prospect St. School.	53	Main and Knollwood Rd.
228	Chestnut Hill School.	54	Ash and Cross.
23	Woburn and Temple.	55	Reading Rubber Mills.
231	West beyond Longwood Rd.	6	C. H. Bangs Co. (Private)
232	Junior High School.	61	Lowell and Highland.
24_	Mineral and Hancock.	611	Home for Aged Women. (Pri.)
242	Woodbine and Summer Ave.	612	Locust and Bancroit Ave.
25	Prospect and King.	614	Auburn and Park.
252	Longview Rd.	62	Spare box.
26	Engine 2 Station, Wodurn St.	63	Hanscom Ave. beyond Wes-
262	Berkeley and Freemont.		ton Rd.
27	Summer Ave. and Prescott.	642	Vine and Vale Rd.
28	West and County Rd.	65	Middlesex and Bancroft Ave.
29	West and King.	67	Middlesex Ave. and High.
291	West and Longwood Rd.	69	Franklin and Van Norden Rd.
31	Howell, ordere and trime in	* 8	Out of Town.
312	Lowell, Dustin & Parkman Rd.	* 81	Call to Wakefield.

- \* 82 State Sanatorium, No. Reading.
  - Special Signals
  - 2 All out signal.
  - 2 Test, 7.45 a. m. 5.45 p. m.
  - 22 No school signal

- 3 Followed by box, 2nd alarm.
- 3 Followed in one min. by 3, Boy Scout Call.
- 4 Followed by box, 3rd. alarm.
- 4 Blows, Police call.
- \*Transmitter boxes can only be sounded from Central Fire Station.

Respectfully submitted,

HUGH L. EAMES, Superintendent of Fire Alarm.

#### CUSTODIAN OF SOLDIERS' AND SAILORS' GRAVES

The Honorable Board of Selectmen Town of Reading

I beg to submit the following report as Custodian of Soldiers' and Sailors' graves. There have been thirty-four veterans' graves repaired during the year.

I wish to commend Supt. Pierpont for the fine condition in which he has kept the Veterans' Graves during the past year.

Respectfully submitted,

HARRY A. TURNER Custodian of Soldiers' and Sailors' Graves

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